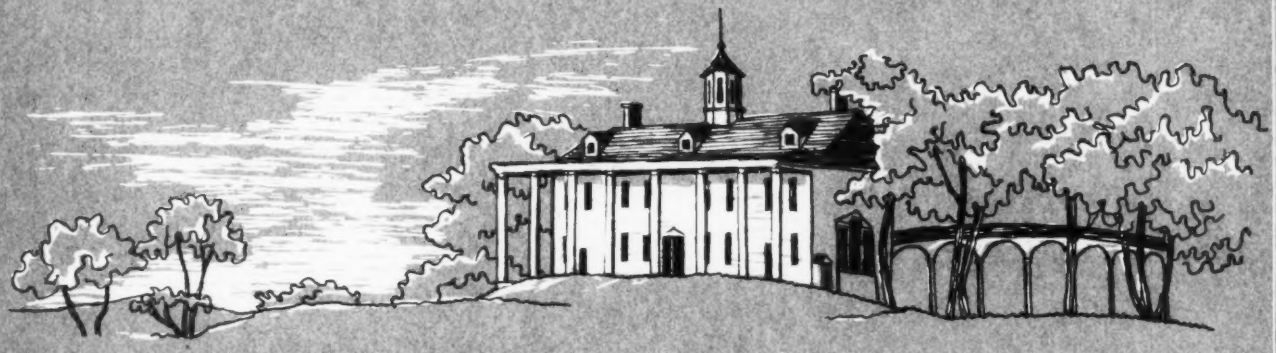
JOURNAL

OF AMERICAN INSURANCE

FEBRUARY, 1959 Vol. 35 - No. 2



Facts of Fame About Mutual Insurance

Is This "Mandatory" Insurance Sound?

Centennial Salute to the Petroleum Industry

Probe of a Tragic Fire

Dr. Paul D. White on Industrial Heart Disease

This Driver Education Is No Fad

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1 *A Medal for Mutual Insurance*

5 *First Man "in Space"*

6 *Don't Make It Mandatory*

9 *100th Anniversary — Petroleum Panorama*

12 *Our Waterway Wonders*

14 *Probe of a Tragic Fire*

16 *Meet a Major Taxpayer — Insurance*

18 *Worried About Industrial Heart Disease?*

21 *Atoms for Peace: A New Job for Insurance*

24 *From Our Annals — Mount Vernon*

25 *Doctor, Doctor!*

29 *A Very Important Few Minutes*

30 *Driver Education — "Elemental as the Three R's"*

33 *Close-ups of Our Commissioners*

PETROLEUM'S 100TH

AMERICA'S phenomenal progress is, in large measure, a story of trade associations—of their foresight, enterprise and leadership—and of the cooperation fostered by them on many fronts in behalf of strong, safe business principles.

Typical is The American Petroleum Institute, serving the oil industry, which this year is celebrating its 100th Anniversary.

Befittingly, the API and its industry are first in a feature series which the Journal will publish from time to time.

The API, comprised of some 7,000 oil men, has for 30 years been their forum, information bureau, technical clearing house and national trade association.

Acknowledgment is made to Mr. John F. Campbell and his API associates for expert help and excellent material which made the petroleum feature possible. It starts on Page 9. ⊙

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a medal for

MUTUAL INSURANCE

It merits acclaim, serving and thriving as never before, despite detractors.

MARK UP ONE MORE TRIBUTE to the credit of mutual insurance: It proves what Essayist Emerson said, "To be great is to be misunderstood."

This is a business more than 200 years old. It is flourishing. It is one of the dominant forces in every segment of our national life. It has reduced the cost of insurance to millions of policyholders. It has paid out billions in claims and benefits. And it is still misunderstood—sometimes even misrepresented.

Latest of the stirs centered in Philadelphia, natal city of American mutual insurance and, in fact, of all insurance. The first successful American insurance company was founded there in 1752. Benjamin Franklin was the prime mover in its establishment. And it is still doing business today under its original name, The Philadelphia Contributionship for the Insurance of Houses from Loss by Fire.

Mutual insurance can point to 2,631 other companies as proof of its greatness and solidarity. More than 150 of these are fire insurance companies in business for more than a century. Mutual fire and casualty companies alone had assets of almost $4¾ billion (1957) and paid dividends to policyholders of almost $265 million. Premiums for mutual fire, casualty and life insurance companies (1957) totaled close to $13 billion.

That puts mutual insurance into competitive contention, leading to misunderstanding, misrepresentation and even outright untruths. Much that is anti-mutual is focused on the assessment liability feature. Such was the case in the recent Philadelphia stir involving the long-extinct Seaboard Mutual Casualty Company.

In fact, the most competitive false argument against the mutual form of insurance is that *all* mutual companies have an assessment liability clause in their contracts and that the liability under this clause is unlimited.

Neither of these statements is true. Nor is there anything illegal, immoral, roguish or deceptive about assessments or assessment policies. They are part of the treasured history and genius of mutual insurance. The assessment feature has been dropped by most of the pioneer companies. But assessment insurance is still the choice of so many people that 1,633 mutual companies currently are operating on this plan. These companies, in 1957, collected $67,848,653 in assessments from their members.

On the other hand, many leading mutual companies write only policies which are stated to be, and are in fact, nonassessable.

If the contract contains an assessment clause, it is usually limited to the amount expressly specified in the contract. This point was settled long ago by courts of highest resort.

Ordinarily, the amount of liability in an as-

sessable mutual contract is limited to an additional amount equal to the annual premium. Many of the farm mutuals provide for liability to assessment limited only by the amount needed to pay losses. However, few of these companies have been assessed as much as the premiums fixed by general writing insurers.

Even with an assessment liability clause in their contracts, many mutual companies have never, in their entire history, levied an assessment. In fact, there is a safeguard which renders the levying of an assessment a practical impossibility. This safeguard is reinsurance of excess losses so that the loss in one accident or one casualty is limited, as a general rule, to $25,000. In effect, reinsurance makes it practically impossible for a company's surplus to be wiped out or for an assessment to be levied.

Members of mutual companies know whether their policies are assessable or non-assessable. Under the standard forms of insurance policies used in most states, if a mutual policy is nonassessable, the word "nonassessable" usually appears in bold type on the face of the policy, and is spelled out in greater detail in the text of the policy. Likewise, if the policy is assessable, this is so stated on the first page, with the exact provisions set forth in the text. And with our state insurance laws and regulations being what they are, it is unlikely that any company or agent is going to represent a mutual policy as being nonassessable if, in truth, it is assessable.

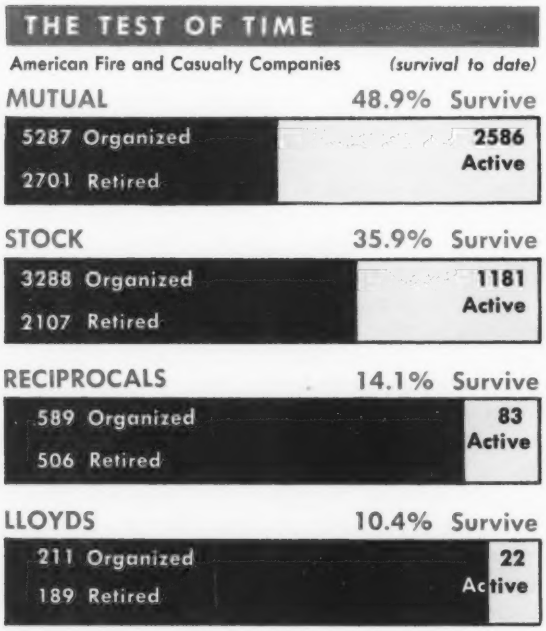
It is a matter of court record that holders of nonassessable mutual policies can not be subjected to assessments if specific denial of such liability is clearly stated in the policy contract.

Yet the melodramatic stories of alleged assessment injustice appear more or less regularly. These usually follow the standard formula of the benighted widow's home or farm put up at sheriff's sale to satisfy a policy assessment on behalf of some villainous insurance company. In making a "good story," the reporter or writer either overlooks or ignores one or more of the salient facts of the case:

(a) The assessment is a lawful judgment, with no grounds for resistance or sympathy; (b) the individual has been aware of the assessment, sometimes for months or years; his membership in a mutual company has not made him liable for an assessment that can persist for many years after the policy period; (c) the majority of other member assessments have been paid; only the resistance, sometimes at great lengths, by a single individual or by one group has prevented closing the case.

Far from being satanic, the assessment feature is one of the enviable virtues of mutual insurance. Early companies thereby made mutual insurance safe. They required each policyholder not only to pay a cash premium but also to sign and deposit with the company a note for, as a rule, four times the amount of his premium. These premium notes were held with the other assets of the companies as a bulwark against any unforeseen disaster resulting in heavy claims.

As the companies grew and accumulated adequate surpluses, the assessment provision became unnecessary. Not one of the so-called New England dwelling-house mutuals (century-old and assessable until 1941; now mostly nonassessable) has ever levied an assessment. In fact, throughout the United States, no legal reserve mutual fire insurance company that acquired $400,000 in cash assets or $200,000 in cash surplus has ever failed or made an assessment. With the need for the assessment provision removed and changes in insurance laws



permitting, the pioneer companies began dropping the provision. Today their policies almost without exception are nonassessable.

However, the purposes and plan of operation of mutual insurance have not changed. That purpose is to prevent loss and provide protection at cost. The plan of operation vests ownership and control in the policyholders, not in stockholders seeking a profit. All premiums go into a common fund for the payment of losses by members.

There are still assessment mutuals. In fact, almost all mutuals started this way, and for certain types of insureds, this is the most practical method to follow. The farm mutuals, of which there are 1,633, operate on this basis. In their own field, they are the dominant factor.

These assessment mutuals collect part of the premium in advance and assess all policyholders for whatever more is required to meet losses and expenses.

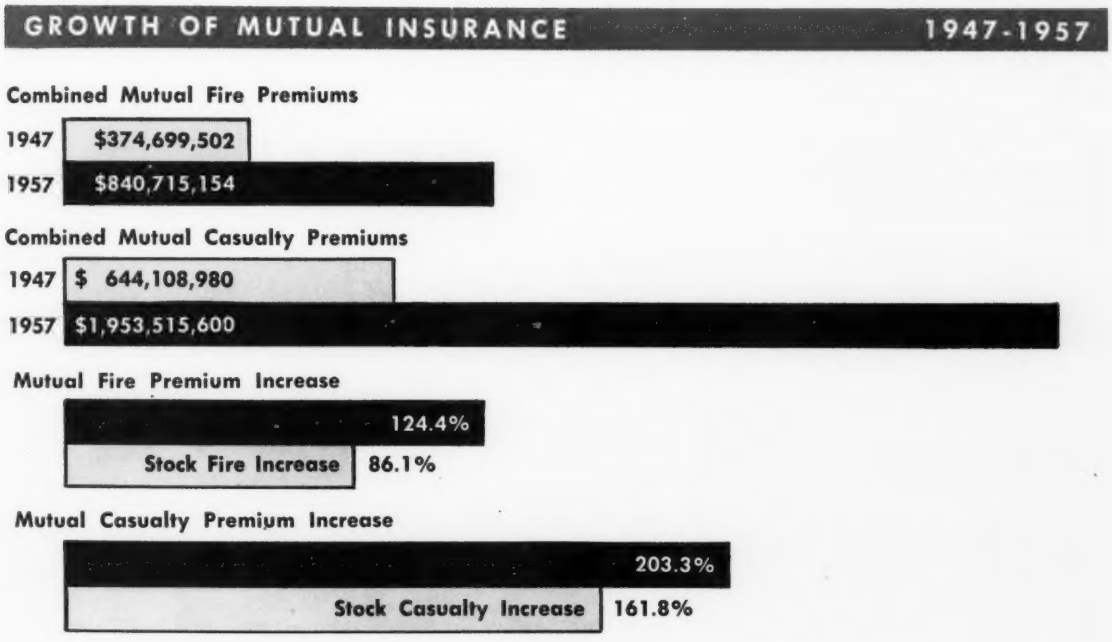
A second type of mutuals are the deposit premium companies. These collect a down-payment of several times the anticipated annual premium. The excess over the normal amount constitutes a reserve which, being invested, produces earnings. These earnings, together with those produced by underwriting results, may be returned to the policyholders as dividends. This is the plan under which the Associated Factory Mutuals operate. No mutual group has been more successful.

Third as a group among the mutuals are the advance premium companies with stipulated assessment liability. This plan provides for a cash premium approximating published bureau rates. The unused or unabsorbed portion of the premium is returned to the insured as a dividend at the termination of the contract. Or, if need be, policyholders may be assessed for the stipulated number of premiums in addition to the premium paid.

A variation of this third plan is sometimes used in which the premium is less than the published bureau rates. Then the insured may be held liable for his share of whatever additional amount is needed, subject to the limit specified in the policy.

Today, the larger mutuals are in a fourth category, that of the nonassessable, advance premium mutuals in which the rate charged is in full payment for the contract period and the policyholder can not be called upon for any additional payments. The right to issue such policy contracts is now generally controlled by statute laws of the various states.

Every state now permits these nonassessable policies. In most of the states the law prescribes



a minimum surplus, (usually $200,000, or more), as a prerequisite to such underwriting.

"Nonassessable" means just that, in spite of rumors, gossip and misunderstanding that circulate around publicized cases.

When a mutual company issues nonassessable policies and later becomes insolvent, neither the company nor the receiver can assess the holders of the nonassessable policies. If the company's surplus falls below the minimum amount fixed by statute for the issuance of nonassessable policies and the company later has to return to issuance of assessable contracts, the holders of the nonassessable policies still cannot be assessed.

In the notable Texas case of Moreland et al v. Knox, 268 S.W. (2d) 744 (1954), the mutual insurance company, without objection by the state insurance regulatory authorities, issued nonassessable policies when its surplus was below the statutory minimum. The court held that holders of such policies could not be assessed by the company nor by the company's receiver.

Assessment Principles Met Founders' Tests

It is as true today as it was in Franklin's time:

If there had been anything wrong with the assessment principle, it would not have been permitted by the spirit of conservatism and solidity that went with the founding of mutual insurance and has remained an inherent quality.

In tribute to those principles, mutual insurance has been in the forefront of the economic progress of the United States, in the development of the West, and in the rise of modern industry. Every aspect of American life has had the benefaction of mutual insurance through farm mutuals, mill, lumber and hardware mutuals, and the other firms that insure ordinary as well as unusual risks.

Sound sense and business judgment were the hallmarks of the industrial, financial and political leaders who have participated in the creation and management of mutual insurance in the U.S.: Franklin, economist, and founder of the business in America; John Marshall, lawyer and law giver, upon whom fell the duty of examining and approving the articles of the Mutual Assurance Society of Virginia, organized in 1795 and to which company he turned for protection for the building which was to become famous as his dwelling; Thomas Jefferson, drafter of the Declaration, and father of Democracy, who secured from the Virginia company the policy protecting Monticello; Bushrod Washington, nephew of the General, who sought and obtained protection on the now historical Mount Vernon.

Many Famous Coverages in Mutual Insurance

Co-famous with mutual's personalities has been the protection it has afforded. American mutuals had coverage on the famous ghost ship, Mary Celeste, and on the ill-fated Titanic; they carried a policy on the moving of an entire sand-and-gravel plant from Pittsburgh to Chattanooga; and they once insured a crystal ball owned by a fashionable future-gazer who was consulted by Queen Elizabeth II before her marriage.

Those are just a few of the "spectaculars." Additionally, and strictly in the line of routine business, thousands of industrial and mercantile companies, hundreds of thousands of individuals, scores of hundreds of public bodies—federal, state and municipal, along with trusts and foundations obtain insurance service and protection from mutual insurance companies.

In the past 200 years, payments made by mutual companies to their policyholders have ranged from the £145, 12 shillings collected in 1753 by one Peter Bard whose dwelling was damaged by fire, to the more than $1,000,000 paid on the score of claims resulting from the disaster at Texas City in 1947.

With such a history and performance record, mutual insurance could hardly escape being a target for competitive argument, false rumor and misunderstanding. In the face of that, survival alone would have been test enough. Mutual insurance not only has survived, it is stronger today that it ever was. ⊙

INSURANCE DOES IT!

THE ARTIFICIAL WHALE, essential to the filming of the elaborate production, Moby Dick, was twice lost in storms and had to be entirely reconstructed. Insurance came to the rescue with reimbursement for extra construction costs and filming delays.

An insurance patriarch, Edmund Halley, was making history in space ventures almost 300 years ago.

FIRST MAN "IN SPACE"

TODAY S SPACEMEN are still trying to get on the moon and return, but a noted artisan in the insurance field was astounding the world almost 300 years ago with his feats in "moon shots," orbits and space probes.

He was Edmund Halley, of comet fame, also credited with originating the science of life statistics with his *Breslau Table of Mortality*. Through his pioneering actuarial work, he laid the cornerstone for figuring modern life annuities on a scientific basis and thereby made himself everlastingly insurance famous.

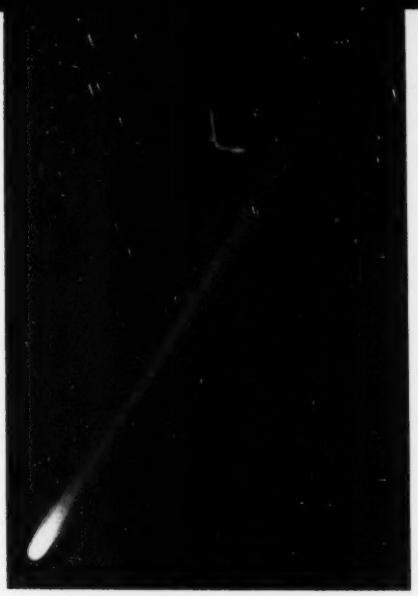
English astronomer and mathematician, 1656-1742, Halley was the first astronomer to predict the return of a comet and the first to point out the use of a transit of Venus in determining the parallax of the sun. Using Newton's theory, he calculated the orbit of the great comet of 1682, identified it as the one observed in 1531 and 1607 and closely predicted its return in 1759. Then bearing his name, it made its most recent appearance in 1910.

Observing the moon through the complete revolution of its nodes, which took 18 years, is among his many other contributions to space science of today.

In modern insurance, Halley's actuarial artistry is threaded through some 5½ million annuities on record in 1957 with U. S. life insurance firms, guaranteeing policyholders future annual income of more than $2 billion.

Likewise, the actuarial profession has grown. Today the Society of Actuaries lists 1,825 life insurance members, and the Casualty Actuarial Society's roster numbers 332 who deal in the statistics of fire and casualty work. Modern actuaries go far beyond studies in loss probability; they range from operations research to economic forecasting.

Modern scientists may still get us to Luna and back. If the insurance industry is ever called upon to underwrite the hazards of such travel and commerce, Halley's 18-year observations through the complete revolutions of the moon's nodes may come in handy. ⊙



Halley's Comet, feared and fabled for centuries, shed its mystery under the actuarial eye.

Photos: Above, Yerkes Observatory; below, U.S. Army

Halley's contributions to space lore, now advanced to this '59 stage, ranged from moon study to publishing Newton's Laws of Motion.

We already have free-choice insurance protection against uninsured motorists; "mandatory" will make new problems.

DON'T MAKE IT "M

VIRGINIA HAS A REPUTATION for some notable documents and decrees, including the first constitution of a free American state.

Right now, the Old Dominion is in the limelight again as the most recent state to decree *mandatory uninsured motorist coverage* for all insured car owners as the hoped-for solution to one of our motor-age problems, the uninsured, financially irresponsible motorist. Briefly, such coverage is designed to put the insured motorist who has been involved in an accident with an uninsured driver in substantially the same position as if he had been injured by an insured motorist.

Virginia, then, is a vantage point for taking stock of public policy on a matter vital to all.

Most of us, as citizens of 46 states and territories where the legislatures will be in session the next few months, will be hearing rumblings of the uninsured motorist problem. In some of these states, a solution—most probably extreme —will be sought by the assembled legislators.

"Why, we already have that," is a common rejoinder of most people when they hear "mandatory" mentioned in conjunction with automobile insurance. They couldn't be "wronger."

Their state may have some form of a law to require financial responsibility of motorists under certain circumstances. Only three states —Massachusetts, New York and North Carolina —have a compulsory automobile insurance law applicable to all motorists.

Mandatory uninsured motorist coverage is something else and quite different. Only three states have attempted such a solution. New Hampshire was first in 1957, followed in order by New York and Virginia in 1958.

Far from solving anything, mandatory application of the coverage only complicates the uninsured motorist problem.

Too many things are against "mandatory U. M." It may even be unconstitutional as enacted in some states. But should it pass that test, its major other faults condemn it and few virtues commend it. It strikes at private enterprise. It spawns endless red tape. It saddles motorists and tax payers with added, unnecessary costs.

Legislators in a few states have turned to the extreme of *mandatory uninsured motorist coverage* out of thinking that there are too many financially irresponsible motorists on the highways and that something drastic ought to be done about them. But ironically, mandatory coverage does not touch them.

Uninsured motorist coverage, as such, is good if properly used. As a matter of fact, it is now offered by most insurance companies as a means by which every car owner can protect himself from loss caused by the financially irresponsible motorist. If you don't have this "U. M." coverage, you can get it.

The trouble starts when we commence tampering to make the coverage *mandatory*. That introduces compulsion by the government, on the insured motorist, to take something that is already available on a voluntary basis. This is not a law to make sure the motorist is held responsible for damage he does to others. It is a law compelling him to protect himself. Then we tamper some more in a futile effort to overcome the mistakes that were made with *mandatory* by some other state.

The so-called Virginia Plan, for example, is a tampered-up version of the New Hampshire mandatory uninsured motorist law brought for-

T "MANDATORY"

ward by well-meaning Virginians in an effort to solve the problem without taking on, too, the evils of the New Hampshire plan. Chief of those evils, foregoing all the others, is the fact that it saddles the uninsured's financial responsibilities on the insured motorist.

This the Virginia Plan sought to correct by breaking the job down into three bills.

The first of these bills, on the mandatory coverage, provides nothing not already available to motorists on the voluntary basis. It requires that all policies of liability insurance on motor vehicles pay to the insured all sums legally due him as damages from the owner or operator of an uninsured motor vehicle. This includes bodily injury coverage of $15,000 on any one person and $30,000 on any accident. The property damage limit is a minimum of $5,000 subject to a deductible of $200. Hit-and-run vehicles are included among uninsured motor vehicles. Also included are vehicles on which insurance companies have disclaimed liability.

One objectionable feature that has been pointed out in this first bill is that it specifically prohibits any provisions requiring arbitration of any kind under the uninsured motorist coverage. This impedes easy settlement that might be effected without prolonged and costly litigation.

The second bill in the plan attempts to take the "bite" off the insured motorist and put it on the uninsured. However, in so attempting to do, the plan raises many more problems which foredoom its successful operation. The gimmick is a $15 fee imposed on uninsured motor vehicles at the time of registration. This is for the purpose of building up a state fund, which will be explained later.

Around this $15 fee is where the red tape begins to spawn. The Commissioner of the State Corporation Commission is authorized to require that any person applying for registration certify as to his insurance coverage, produce a certificate of insurance or self-insurance, post bond, deliver cash or security. Presenting a false certificate or false evidence as to insurance is a misdemeanor. Getting the certificate means that motorists are in for an annual round of red tape, queueing up and other inconveniences. There is more red tape in the fact that insurance companies must give to the Commissioner notice of cancellation or other termination of insurance not later than five days afterwards.

The jackpot of all the $15 goes into the state treasury to be held in a special uninsured motorist fund for disbursement under the third bill of the plan.

This disbursement, under part 3 of the plan, is to companies writing motor vehicle liability insurance in the state. And here the red tape gets more entangled and confusing. The distribution is annual. It is made by the State Corporation Commission. It is divided among the insurance companies on the basis of their proportionate share of the *premium income* from the uninsured motorist coverage in the state. This premium income is determined on basic limits coverage only. The uninsured motorist coverage rate is determined by the State Corporation Commission in accordance with the

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Mightier Than "Mandatory"

If *mandatory uninsured motorist* coverage is unsound and ill-advised, what is the solution to the problem of the financially irresponsible driver?

As explained briefly in this article, uninsured motorist coverage, on a voluntary free-choice basis, is now offered by most insurance companies so that every car owner can protect himself from loss caused by financially irresponsible motorists.

A comprehensive three-step program, including uninsured motorist coverage, dealing with all phases of the financially irresponsible motorist problem was described in, "United Against Irresponsibility," in the January '59 Journal. This is insurance's all-industry program prepared in many months of hard work by the industry's most able experts and now being put forward in all states as a sound and workable solution.

rating laws, without regard to the Uninsured Motorist Fund. Then, the Commission is to reduce the rate, to policyholders, in proportion to the funds distributed to the insurance companies. This manipulating to leave the burden of the cost on the uninsured motorist would be fine if the plan didn't beget a whole series of problems.

Constitutionality comes up immediately. The $15 fee amounts to a tax levied by the state on owners of uninsured motor vehicles. The funds are to be distributed to private insurance carriers. Hence it can be argued that the state is levying a tax to be used for a private rather than a public purpose.

Imposition of the fee could be ruled unconstitutional. Then the burden of financing the plan would fall upon insurance carriers. Eventually it would be passed on to insured motorists through rate increases. Thus the whole purpose of the plan, to shift the cost of the coverage to the uninsured motorist, would be defeated.

Imposition of the fee could be upheld, but distribution of the funds to private carriers could be ruled invalid. That would leave a sizable state fund with no designated use. An obvious next step would be the creation of a state insurance fund in direct competition with the private carriers and free enterprise.

Any taxpayer or legislator who goes for the Virginia Plan is letting himself in for endless red tape and pyramiding costs, to be paid through taxes, higher insurance rates or both. That is inherent in the insurance certificate if such is required by the commissioner. Insurance carriers would be swamped with extra red-tape paper work during the peak of each registration year. Cost of that would necessarily be reflected in the rates.

Next, an elaborate and costly administrative organization is required within the motor vehicle department merely to file and process the certificates. That would touch off a whole chain of other jobs. The department would have to: (1) process all notices of cancellation or termination from insurance carriers; (2) notify the vehicle owner that he must either get other insurance or else pay the uninsured motorist fee; (3) if "2" wasn't done, the department would have to revoke the registration and plates of the motor vehicle.

Even if an army of workers could be recruited to carry out such a complicated administrative task, it is still doubtful whether the program could be made totally effective.

Unwittingly, too, plans such as the Virginia program could defeat one of their stated purposes, which is to induce more motorists to get insurance coverage. This could come about through the complicated disposition of the uninsured motorist's fees to companies writing motor vehicle liability insurance. Without going into all the technical details, the method of distribution does not take into account the fact that two companies having the same proportionate share of total premium income from the uninsured motorist coverage could have widely disproportionate risks of loss.

This could occur when a company has a high volume of auto liability business in an area with a high percentage of uninsured motorists. The mandatory feature of the plan exposes this company to comparatively higher losses. So, to retain its volume of liability business, such a company might possibly consistently lose money on the uninsured motorist coverage, while another company, with the same volume of premium income, would be making money.

Thus, companies which write a majority of their business in areas of high exposure might refuse automobile liability risks they otherwise would take. This would force more persons into the assigned risk plan and thereby undercut one of the Virginia Plan's stated purposes.

One of the most glaring and ironical flaws of all these plans—New Hampshire, New York, Virginia—is that they put free states in the position of forcing free-born citizens to buy insurance to protect themselves. In effect, the state is saying to the individual that he does not have to purchase insurance to protect others from his acts of negligence, but if he does buy insurance, then he must also buy insurance to protect himself from the negligence of others. It is contemplated, of course, that the uninsured motorist fee will reduce the cost of this coverage practically to nothing for the insured motorist. But it is entirely possible that the amount collected will not offset the additional cost. In that case, the insured motorist will have to make up the deficit. Then too, the additional administrative burden on the companies will be reflected in increased costs to the insured.

On all counts—and there are many—mandatory uninsured motorist coverage cancels itself out as a solution of the problem. ⊙

100th Anniversary

PETROLEUM PANORAMA

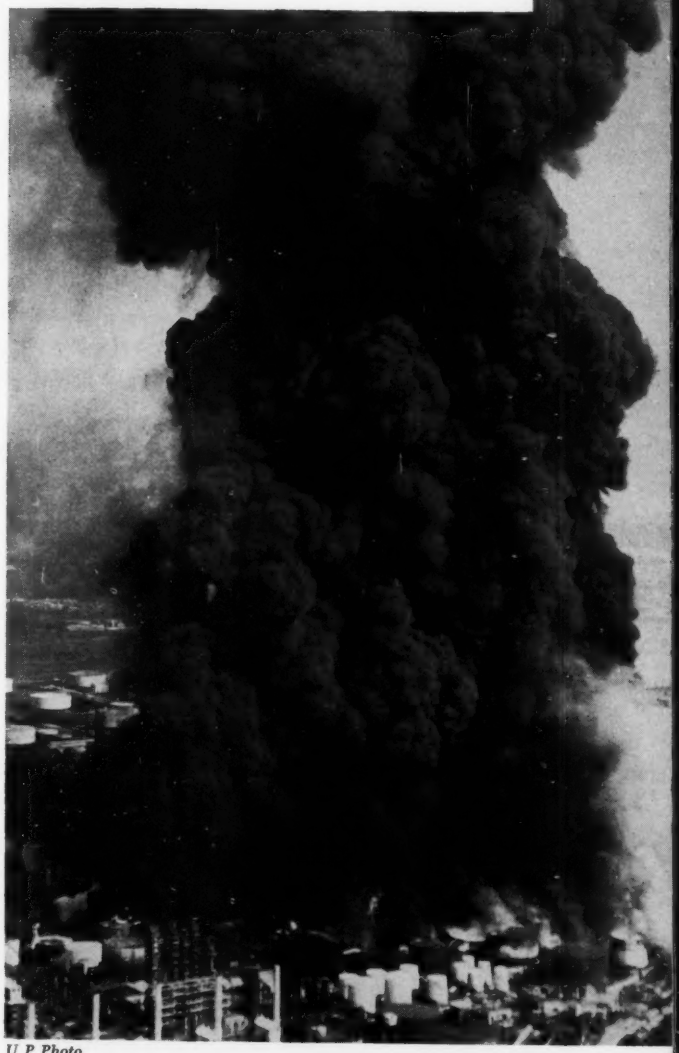
From the day of the famous Drake well, insurance has had partnership with the petroleum industry.

EDWIN L. DRAKE did more than strike crude oil when he drilled the 69½-foot "discovery" well near Titusville, Pennsylvania, in 1859. He started something that has never been stopped —and won't for the foreseeable future. Now, in this 100th anniversary year, the American petroleum industry, with gross assets totaling $58.5 billion and still growing, is the third largest industry in the country, surpassed only by the utilities and agriculture.

After Drake's discovery, mutual insurance was the next big thing that came along in the petroleum industry in the latter half of the 19th century. That chapter, immortalized by Edward Atkinson, is recounted in Insurance, The Partner, (see page 11).

Ever since then, the petroleum industry and insurance have been teamed up in one of the nation's classic examples of business development and business security.

Today, a few short decades after Drake's discovery, petroleum provides 68 per cent of the total energy requirements of the U. S., yields 500,000 distinct compounds and supplies 2,300



Insurance history was made in this memorable fire at Standard Oil's Whiting, Indiana, refinery, in August '55. Property damage was around $20 million covered by insurance with a $1 million deductible, a coverage originating with Standard in '51. This was the first catastrophe deductible policy written in the American market with approval of state insurance regulatory authorities.

U P Photo

oil products. Thirty-four states now contribute to the more than 7,000,000 barrels produced daily by a half million wells.

With benefit of insurance's resources and protection, the U. S., with only one-tenth of the land favorable for oil and gas production, produces approximately four-tenths of the world's oil. Further exploration and drilling, to meet growing domestic demands of the 14,300,000 barrels per day by 1966, calls for the expenditure of $54.6 billion during the next ten years. For built-in insurance of the nation's security, the petroleum industry plans to discover and hold in reserve 1½ barrels for every barrel taken out of the ground.

Achieving that will put an ever-mounting premium on vigorous and comprehensive exploration and on new and improved drilling methods. Today's Drakes are encountering far tougher going than at Titusville. Only one out of nine exploratory attempts, on the average, discovers oil. Only one out of 44 uncovers enough oil to make production commercially feasible. Recently, in Oklahoma, an oil company sank the bit to a depth of 20,246 feet before giving up the well as a dry hole. Cost of this "duster" ran almost to $5 an inch and totaled more than $1 million.

For processing capacities, stepped up to the level of future demands, the oil industry anticipates capital expenditures of $11.2 billion between 1958 and 1967.

During the same period, $3.4 billion will be spent in the industry's transportation branch to improve and expand the myriad of ships, trucks, and pipelines.

Marketing facilities, pressed to service the needs of 14 million more cars and trucks in the next few years, will be improved with an expenditure of $7.8 billion.

What Drake started 100 years ago is just on the threshold of a bright new era. New products utilizing petrochemicals are expected to increase at the rate of 400 a year. There will be revolutionary changes in motor fuels and lubricating oils . . . increased use of petroleum-derived asphalt for roads . . . development of jet fuels . . . solid rocket fuels . . . plastics . . . and future new uses which can not even be guessed. ⊙

THE PETROLEUM INDUSTRY AT A GLANCE

AVERAGE WEEKLY WAGES, '57

Production	$106.49
Refining	112.60
Comparative all U. S. manufacturing	82.39

PRODUCTION

Producing wells	569,273
Daily production, bbls.	7 M.
Crude oil, bbls. '57	2,616 M.
Proved reserves, bbls.	30,300 M.
Exploratory, per year	$250 M.

Wells completed	'57	(1859-1957)
Oil	28,272	1,107,044
Gas	3,917	122,088
Dry	20,762	453,329
Service	1,066	34,191
	54,107	1.7 M.

ENTERPRISES, NUMBER	12,010
EMPLOYEES	305,100
FIXED ASSETS	$28,100,000,000
CAPITAL EXPENDITURES	$ 4,525,000,000

INSURANCE THE PARTNER

MUTUAL INSURANCE and its Edward Atkinson are as immortal in the petroleum industry as Edwin L. Drake and the first well. Atkinson, for 27 years president of the Boston Manufacturers Mutual Fire Insurance Company (1878-1905) and an early power in the Factory Mutual System, is credited with originating and sponsoring research which brought revolutionary changes in lubricating and illuminating oils.

Atkinson's role in the oil industry grew out of his zeal for preventing fires and thus reducing the cost—and losses—of mutual insurance in textile manufacturing, the first major industry to become solidly es-

RESEARCH EXPENDITURES

1957	$231,400,000
1959 *(Est.)*	$265,000,000
1961 *(Est.)*	$294,400,000

DOMESTIC PRODUCT CONSUMPTION

Wholesale '57
$14,294,650,000

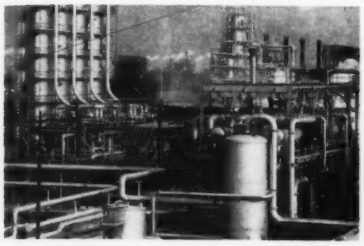
TOTAL TAXES PAID

'57 Approximate
$6,686,944,000

REFINING

Refineries 318
Crude oil capacity, bbls. daily.... 9.5 M.
Oil products 2,300

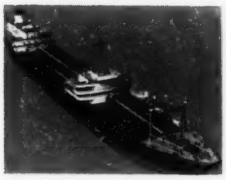
Aviation gasoline Natural gas
Liquified petroleum gas
Dry cleaning fluids Polishes
Automotive gasoline Tractor fuels
Oils for dipping sheep and cattle
Diesel fuels Lighter fluids
Home heating oils Synthetic rubber
Road oils and asphalts
Spraying oil for trees
Insecticides Fungicides Weed killers
Printer's Inks Plastics



TRANSPORTATION

PIPELINES

201,800 miles
Cost per mile:
26-in. $54,000
30-in. $84,000
The "Big Inch" pipeline is 24" diameter, carries 300,000 bbls. daily.



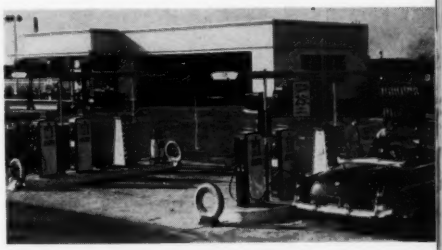
TANK CARS
96,074

TANKERS
Government & private 470
Barges & small lake tankers 2,138

TRUCKS
41,837

MARKETING

Oil products 2,300
Service stations 181,747
95% privately owned
Home oil burners ..... 9 M.
Service station sales
1954 ..... $10.7 B.
1957 ..... 15 B.
Per station average, '57:
Sales $89,265
Gallons 203,000
Av. gasoline tax ..... 8.9¢ gal.
State ..... 5.9¢
Federal ..... 3 ¢
Motor fuel tax totals, '57:
State ..... $2,894 M.
Federal ..... 1,626 M.
Combined ..... 4,520 M.



270	1,378	28,174
212,200	128,900	1,002,900
$8,750,000,000	$4,750,000,000	$5,100,000,000
$ 950,000,000	$ 360,000,000	$ 475,000,000

tablished in the U. S. industrial revolution.

Studying records from hundreds of textile-factory fires, Atkinson discovered that a high percentage might have started because many of the lubricating oils used on the new and faster-moving machinery were unequal to the friction, and frequently caught fire.

He wanted the facts and thereupon inaugurated and financed some of the earliest known industrial research, through the Massachusetts Institute of Technology. Five years' work resulted in setting up standards for both lubricating and illuminating oils which revolutionized their manufacture, commercial handling and industrial use.

Atkinson, furthermore, spread the new information among millowners, notably in the case of the "dangerous" new kerosene-burning oil which was then replacing whale oil for illumination.

Plant and industrial fire-fighting forces, plant fire-fighting equipment, industrial fireproof construction, and strict inspection, all of which are standard in the oil and other industries today, also were pioneered by Atkinson and by mutual insurance.

From Drake's day onward, insurance thus has had a partnership and guardianship with the petroleum industry, whether the job be the safe lubrication of a textile-mill spindle or security on the world's largest tanker of 707,000 barrels capacity.

From oil's beginning to end, through production, refining, transportation and marketing, modern insurance offers no less than seven specific coverages, ranging from workmen's compensation to loss of well. Not the least of the insurance roles is the fact that the petroleum, refining and related industry is the largest user, among all U. S. industries, of capital funds obtained from insurance investment money. ⊙

American commerce has sailed to eminent leadership behind protective insurance.

OUR WATERWAY WONDERS

THERE'S SOMETHING HEROICALLY hardy about our waterway wonders. Barges, tankers and ocean-going behemoths have not yet gone to the dry docks of eternity despite:

—The worst ship disaster in U.S. history.

—Air flight of the heaviest cargo in history—117,900 pounds—on the recent 55th anniversary of powered flight.

—Flying jeeps, atomic subs, jet airliners and other wonders of modern transportation.

Last year, five million tons of goods were moved on New York State canals alone, while in our shipyards the U.S. recorded its busiest peacetime quarter in history.

No small amount of the hardiness in our modern waterway transportation and commerce stems from the protection afforded by insurance.

United States Lines

Years of experience brought new standards in fire safety to the SS United States. Her only wood: pianos and butchers' blocks.

True, the full marine functions of American insurance had not yet developed when the U.S. had its worst ship disaster in history. This was the explosion of the steamship Sultana on the Mississippi River, April 17, 1865, with the loss of 1700 lives, far more than on the Lusitania or Titanic.

Now, however, American firms are writing more than $200 million (1957) in ocean marine premiums alone, an amount unequaled except in wartime 1942. In a business with a strong international flavor, American firms supply 20 per cent of the insurance on the famous Cunard liners, Queen Mary and Queen Elizabeth. About a fourth of the American Marine premiums recorded last year involved foreign shipping.

One notable feat in U.S. ocean marine security hinges on the "world's fastest liner," the SS United States. She set a new record in ship's insurance — $31 million — with the $13,750,000 written by American firms going on the record as an all-time high for the industry. With her insurance and her safety features, the SS United States stands—or sails—well-guarded.

Along our inland waterways, America today is bustling with maritime activity. Small craft far outnumber their deep-sea brethren and move much of the grain, coal, petroleum and autos transported within our boundaries. Transfers between inland and ocean-going shippers are frequent and make for some overlapping of insurance boundaries. Ocean marine policies sometimes are in effect to Dubuque, Iowa, and inland marine coverages often protect goods moving from New Orleans coastwise to New York. (Inland marine insurance today involves considerably more than protection of goods on

New waterway history has never ceased, despite the catastrophes on the Mississippi's Sultana and, here, the Robert E. Lee.

Bettmann Archive

inland waters. Premiums of almost $367 million in 1957 represented coverages on a diversity of property being moved by all forms of transportation.)

Insurance resources and services now available to U.S. commerce did not, of course, spring full-blown from the minds of America's marine underwriters. They spent many years developing the facilities to offer protection on such a scale. Shortly after Congress passed the Merchant Marine Act of 1920, thereby encouraging the development of the marine element of American insurance, the maximum available for any one ship was $2.5 million, quite an achievement, at that. The Act, which permitted the formation of marine insurance pools, made it possible for the industry to provide through shared risks the larger limits demanded by modern shipping, much as modern atomic pools are providing protection for nuclear power stations.

In fact, among the newest challenges in the marine field is the seagoing nuclear reactor. Joint study by marine and other insurance experts has been under way for some time, anticipating the day this spring, when NS Savannah, the world's first atomic-powered commercial vessel, slides down the ways. Along with the Savannah's protection, what is sought is an insurance pattern that will serve for the other atom freighters and liners which will surely follow.

Working out a policy for the Savannah is a far cry from the insurance chore of the Atlantic Mutual back in 1872, when a $3,400 mutual policy was issued on cargo aboard the brigantine Mary Celeste. Nor is the outcome likely to be at all similar. The Mary Celeste, 27 days out of New York enroute to Genoa, was found sailing aimlessly without a soul on board, and to this day there is not so much as a clue to the mystery.

Insurance will sail with the Savannah, most certainly, but the likelihood of her becoming a ghost ship is nil in view of modern communications, marine safety and other measures for insuring against the uncertainties of tomorrow. ⊙

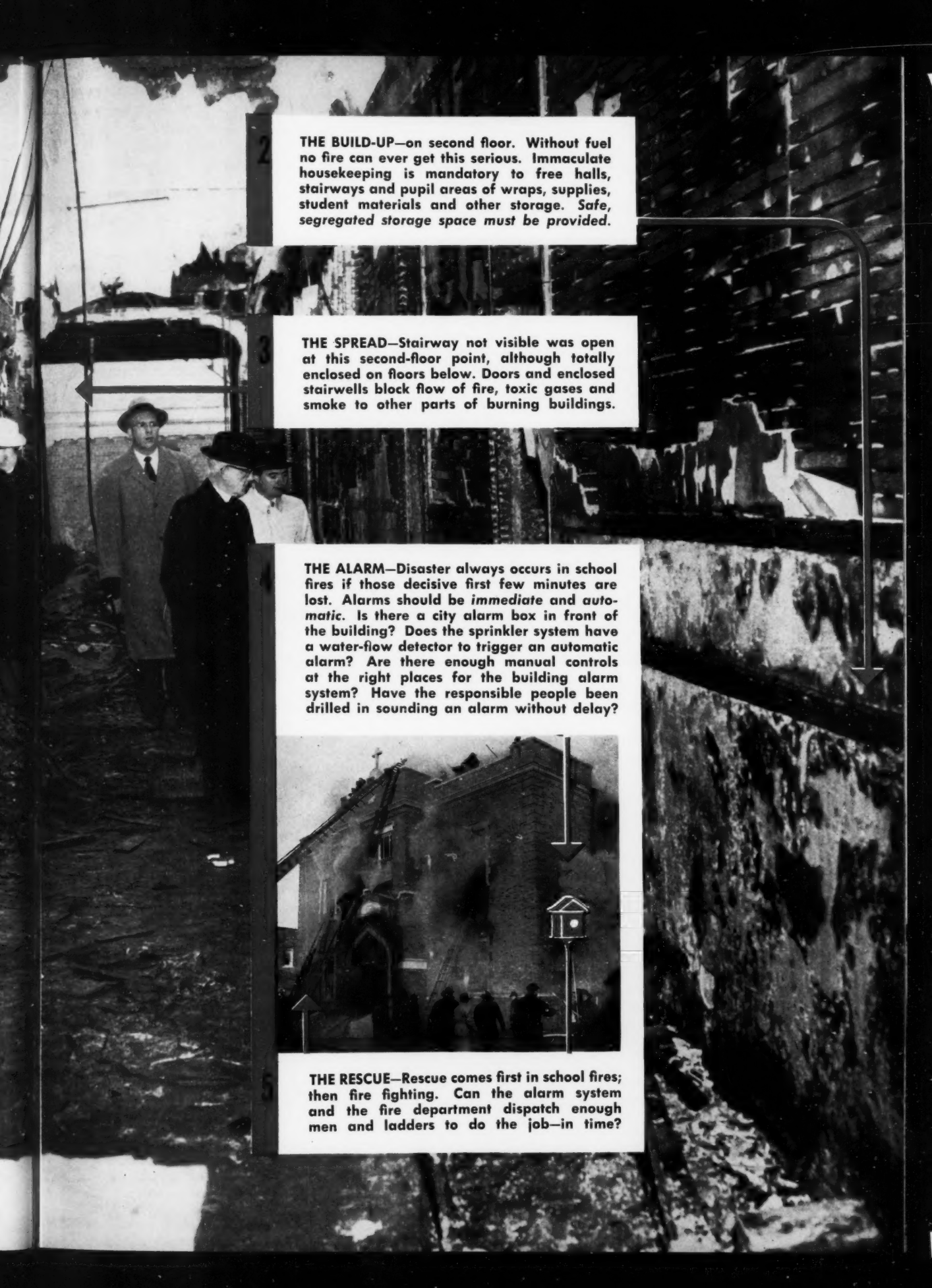
Journal
Exclusive—

A CORONER'S JURYMAN PROBES A TRAGIC FIRE

THE START—Fire originated in this basement area. Suspected cause: careless smoking. Also suspect was faulty wiring in concealed space above second-floor ceiling. Control at origin points is basic. *The only sure control is with automatic sprinklers.*

HOW DID IT HAPPEN? How avert similar tragedies in other schools and public buildings? A special coroner's jury of experts probed for answers to these and other questions in the wake of the nation's third worst school fire, at Chicago's Our Lady of the Angels school, December 1, '58, which took the lives of 90 children and three nuns, hospitalized 41 others.

Serving on that jury was Dale K. Auck, director, Fire Protection Division, Federation of Mutual Fire Insurance Companies, and a nationally-known expert in fire protection engineering and safety. Here, for Journal readers, is his count-by-count of what happened and how similar tragedies can be averted. ⊙



2

THE BUILD-UP—on second floor. Without fuel no fire can ever get this serious. Immaculate housekeeping is mandatory to free halls, stairways and pupil areas of wraps, supplies, student materials and other storage. *Safe, segregated storage space must be provided.*

3

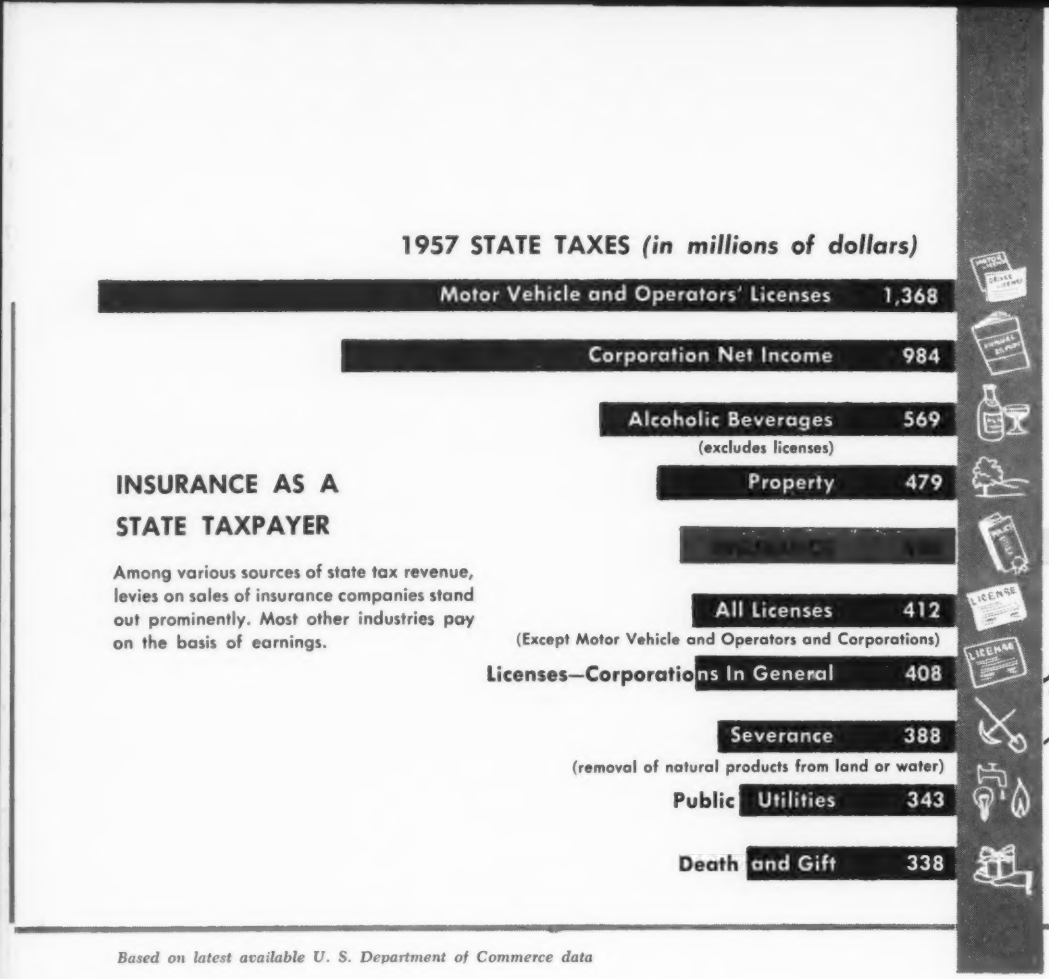
THE SPREAD—Stairway not visible was open at this second-floor point, although totally enclosed on floors below. Doors and enclosed stairwells block flow of fire, toxic gases and smoke to other parts of burning buildings.

4

THE ALARM—Disaster always occurs in school fires if those decisive first few minutes are lost. Alarms should be *immediate* and *automatic*. Is there a city alarm box in front of the building? Does the sprinkler system have a water-flow detector to trigger an automatic alarm? Are there enough manual controls at the right places for the building alarm system? Have the responsible people been drilled in sounding an alarm without delay?

5

THE RESCUE—Rescue comes first in school fires; then fire fighting. Can the alarm system and the fire department dispatch enough men and ladders to do the job—in time?


1957 STATE TAXES (in millions of dollars)
Motor Vehicle and Operators' Licenses 1,368
Corporation Net Income 984
Alcoholic Beverages 569
(excludes licenses)
Property 479
All Licenses 412
(Except Motor Vehicle and Operators and Corporations)
Licenses—Corporations In General 408
Severance 388
(removal of natural products from land or water)
Public Utilities 343
Death and Gift 338
INSURANCE AS A STATE TAXPAYER
Among various sources of state tax revenue, levies on sales of insurance companies stand out prominently. Most other industries pay on the basis of earnings.
ME
A
MAJ
TAXPA
GROSS PREMIUM
STATE
Federal and state metho of tax
are different. Federal tax vary
but most are based on so porti
earnings. State taxes on levied
or sales. Either way, the result is

Based on latest available U. S. Department of Commerce data

The Insurance Industry's Contribution to Federal and State Budgets Is Nearing the Heady Billion-Dollars-a-Year Level.

WHEN GIBBON said it, it may have been true: "All taxes must, at last, fall upon agriculture." But the era of the agrarian economy in America has passed. Today the industrial or commercial corporate citizen is our key source of tax revenue.

Insurance, for example, in latest figures was producing federal income of well over $500 million a year as a full-grown contributor to the economy's financial needs. Our farms, of course, are still contributing materially, their latest federal tax tally being nearly $64 million.

Further evidence of insurance's sizable role in our national tax picture lies in recent new attention to federal methods of taxing the industry. Growth means changes and problems, for a business as for a country. Congress, governmental administrators and industry representatives have put considerable study on a new life insurance income tax formula.

On the state scene, the industry's prominence tax-wise is reflected in the voices suggesting revenue law revisions, on the basis that assessing insurance firms on gross sales results in a heavier load than that on other industries.

This interplay of viewpoints and proposals is inevitable when an industry, such as insurance, becomes one of the country's front-line financial strongholds. Meanwhile, thousands of insurance companies keep providing the funds that help a growing nation stay financially sound.

The process is proof that that quotable mutual insurance man, Benjamin Franklin, perceived something close to an eternal truth when he coined his classic "death and taxes" epigram. ⊙

MEET
A
MAJOR
TAXPAYER

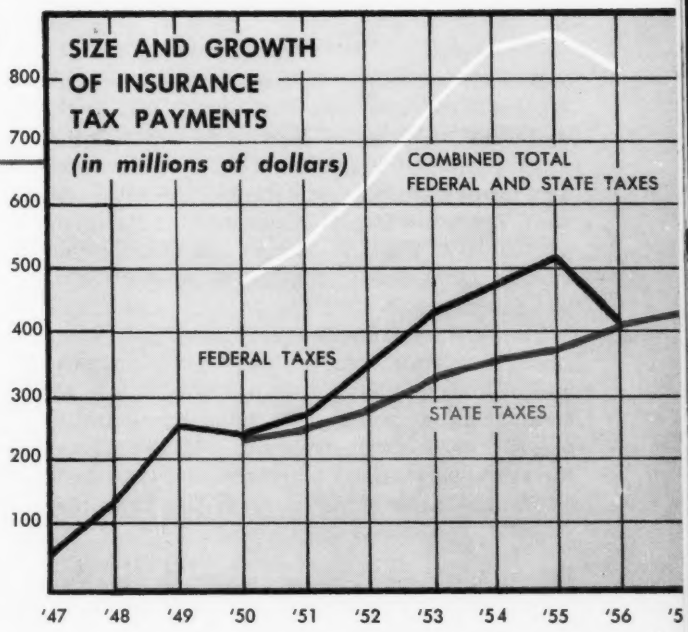
e methods of taxing insurance firms
deral taxes vary within the industry,
ed on some portion of net income or
axes are levied on gross premiums
way, the result is major tax money.

1955 FEDERAL INCOME TAXES *(in millions of dollars)*

Primary Metal Industries	1,472
Machinery Manufacturing (except Transportation Equipment and Electric Equipment)	1,105
Electric Light and Power	938
Petroleum and Coal Products Manufacturing	835
Telephone	769
Banks and Trust Companies	723
Mining and Quarrying	607
[illegible]	504
Railroads and Railways	435
Real Estate	424
Printing, Publishing and Allied Industries	393
Construction	254
Retail Food	232
Rubber Products Manufacturing	226
Auto Dealers and Filling Stations—Retail	156
Air and Water Transportation	147
Radio and TV	81
Agriculture, Forestry & Fishery	68

INSURANCE AS A FEDERAL TAXPAYER

In a comparison of selected corporate income taxes, the insurance industry ranks well up front with the country's most substantial business-taxpayers.



Insurance tax funds have topped $800 million a year since 1954. Drop-off in federal taxes in 1956 was largely the result of losses in stock fire and casualty field. The '57 year was bad, too, but '58 looked a little better, should turn tax take up again when all figures are in.

Worried About "INDUSTRIAL HEART DISEASE"?

"There is no such thing..."

By PAUL D. WHITE, M.D.

The cardiac problem, employment of cardiacs, and compensation of heart cases under workmen's compensation are matters vitally concerning employees, employers, workmen's compensation officials, physicians, and insurers of workmen's compensation risks. This article by Dr. White, one of the nation's outstanding cardiologists, is an adaptation of his address, "Problems Incident to Employment of the Cardiac in Industry," before the 23rd Annual Meeting of the Industrial Hygiene Association. The Journal article is presented here by special arrangement with Dr. White.

WHEN SPECIALIZATION in the field of heart disease began after the First World War in the early 1920's, those of us who were pioneering quickly realized that one of the main problems was heart disease in industry. I can well recall that Professor Henry Jackson, first President of the New England Heart Association, constantly emphasized this problem as needing to be attacked.

During the nearly 40 years that have elapsed since that time, the problem has multiplied, and although much nearer solution, is still far from being answered. We have continued to mention it at fairly frequent intervals during the years, particularly our conviction that work, either mental or physical, is, in the great majority of cases, good for humanity and only very infrequently harmful, but we need for complete proof, more data than we have as yet. Thus, the American Heart Association eventually will be able, in all probability, clearly to state what some of us have been thinking and saying for years without adequate ammunition beyond our individual and collective experiences.

In a paper read before the Health Service Section of the National Safety Council in Boston on September 29, 1921, I myself stated as follows:

"Heart disease and industry are not incompatible. An individual may be productive even while bedridden with heart trouble a large part of the time. The active trained mind of a cardiac cripple may be more valuable in industrial progress than a body in perfect health controlled by a dull intellect.

"In general, we have been inclined to shelter too much our young patients with heart disease. They can usually do more than we have permitted. An example of the interest expressed in their own future as a group is a letter which I received recently from a young man 20 years of age who has been crippled since childhood by rheumatic heart disease, and for that reason unable to obtain all the education which he desired, and who is now facing the need of supporting himself without the best training for a clerical job. He is unable to do hard physical

work and cannot obtain even light work because of the stigma of his heart disease. His plea for the future of the whole group of young people with heart disease overshadows all the rest of his letter. He is a champion of their cause.

"There are two problems of heart disease in industry: First, that of the individual worker; and second, that of the attitude of industry in general. . . . . .

"Every industrial worker with heart disease is a problem in himself. The solution of each problem depends on the answers to two short questions: How much work can the individual do? What is his future? If we can puzzle out the answers to these questions, we can solve the problem of heart disease in the individual industrial worker. The first question is a relatively easy one—to be ascertained at once by questioning the subject, by suitable tests, or by observing the subject while at work. The question would be better put as follows: How much work can the individual do without discomfort?, for sometimes a person will force himself to do work often very distressing and even injurious to himself.

"The other question at times is a very difficult one to answer since the future of the individual depends on a number of factors. In the first place, a correct diagnosis is of prime importance, but this as yet is very often neglected. The very first step in our problem, therefore, is to make a proper diagnosis. This having been made in its entirety, the rest, even the forecast of the future, is not difficult. The other important point in answering the question as to the future of a given case is the study of the individual's reaction to medical treatment or to a definite test of work over a given interval of time. An hour, a day, or a week may suffice to answer this."

In that same paper I made the clear statement that there was no such condition as *industrial heart disease.* I believe that that is still true with the rare exception of the cor pulmonale (heart disease secondary to lung disease) from the inhalation of certain dusts, in particular silica, which can cause silicosis of the lungs, but that disease is on the way out.

We must distinguish in the case of heart and all other diseases too, between causative factors and aggravating factors. This is true of many possible strains which include diet, toxic substances such as tobacco, physical exercise or the lack of it, nervous tension and stress, and infections. All of these factors can be aggravating, but are they really causative? There is more and more indication that in serious coronary atherosclerosis (the basis of important heart attacks) the diet plays a much larger role, given a candidate, but we need more information by research on this and other points.

Equally important is the recognition that no two people are exactly alike, although identical twins are very nearly so, and that the individual, that is, the host, must be considered per se. Candidates for certain diseases must obviously be more protected from certain environmental factors including stress and strain than those who are not candidates, but the importance of identifying the candidate has barely entered into medical thinking or practice as yet.

Most of us already think that hard work, mental or physical, does not injure an otherwise healthy man who has healthy habits which would include avoidance of obesity, of excess in the use of tobacco or alcohol, and of physical indolence. It is recognized by most of us that physical exercise is an excellent antidote for nervous tension, that is, for the mental worker who does no more than sit at his desk or his chair, rides in an automobile, and drowses before a television screen, and that he can be rescued both nervously and otherwise by proper

UP Photo

AMONG DR. PAUL DUDLEY WHITE'S many national and international distinctions as a cardiologist is the distinguished service award of the American Medical Association. He is pictured here wearing the award just after it was presented to him in 1952 by then AMA President, Dr. John W. Cline. Dr. White, Boston, is Consultant in Medicine at the Massachusetts General Hospital, is actively engaged in consulting practice in the field of heart disease, Past President of the American Heart Association and of the International Society of Cardiology, and Emeritus Clinical Professor of Medicine at Harvard. At 72, he is living proof of the theories he discusses here.

exercise, some of which can be carried out in the course of his daily work.

Of the many different kinds of heart disease, the most important are congenital defects, rheumatic heart disease, hypertensive heart disease, and coronary heart disease. There are other less common and important conditions, although in some countries they are more serious than here, such as cor pulmonale from lung diseases, cardiovascular syphilis, and certain infections not yet controlled. There is, to be sure, actually traumatic heart disease, but that is very rare. Not many hearts are actually injured physically by accidents, although rare cases do occur.

It is quite obvious that *congenital heart disease* is not caused by the work of the individual, whether mental or physical, since the person is born with it. Of course, remotely in the mother or in the genes perhaps generations back, there might have been some effect of strain, but that is a guess which would take a lot of evidence to prove. It seems unlikely.

Rheumatic heart disease also is not caused by work. Given a good deal of rheumatic heart disease, acute or chronic in a person, work can be an aggravating factor, of course, but it is an unusual reaction to the hemolytic streptococcus that actually causes rheumatic heart disease.

Hypertension has not been shown to be the result of hard work, mental or physical. Some of the healthiest people I have ever known have had normal blood pressures at the age of 80, 90, or 100 or more—nervous people who have worked hard all their lives.

Nor is there any proof that *coronary heart* disease per se, that is coronary atherosclerosis, is caused by hard work, mental or physical, though here again such may be an aggravating or precipitating factor, and not causative. However, we haven't all the information yet, and it is conceivable that hydrodynamic factors in the range of biophysics, not yet adequately investigated, may perhaps play an early role, but not necessarily in everyone.

The amount of heart disease is important with respect to the effect of strain and trauma. A person with very little heart disease can stand a lot of stress and strain and even trauma, but a person with a very high degree of heart disease and extreme limitation of reserve, either coronary or myocardial, can have his or her balance easily tipped by even a little work.

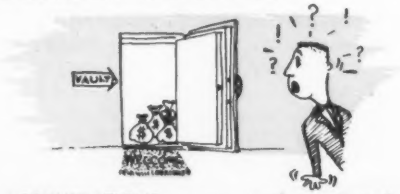
Incidentally, I would like to say that nowadays we rely too much on medicines and not enough on plain rest. We expect medicines to do everything and we and our patients become impatient if they have to rest a few minutes, a few hours, a few days, or a few weeks in addition to taking medicine. Rest can do wonders with respect to this problem. Fairly frequent, that is *annual,* examinations should help a great deal in showing how much heart disease there is.

Finally, I would like to emphasize the fact that work is important for health; in fact, many of us use it as a therapeutic measure for our cardiac patients both in rehabilitation after a heart attack, for example, and in keeping them well. As I said in a talk on rehabilitation at the American Heart Association meetings in New Orleans three years ago:

"I would like to emphasize the beneficial effect of work on body, mind, and soul in any occupation in which it is possible for a cardiac patient to engage. Idleness breeds unhappiness and is actually bad for the health. It is a rare patient indeed who is fit for nothing. It greatly pays to make every effort to find something, either vocation or avocation, into which to fit the sick man or woman, either.

"One of our greatest challenges is to make it possible, on the one hand, for cardiac patients to secure jobs despite the fear of employers to accept them, and on the other hand, to exonerate industry from the unwarranted blame of hurting the heart. I have just said that work is good for a person's health and at least as important, if not more so, for a cardiac (within his capacity) as for a normal person. Therefore, to deprive a crippled person of an important therapeutic help in the form of a job is not only an unsound policy but also an unfair discrimination." ⊙

INSURANCE DOES IT!



CASH ACCUMULATIONS at race tracks in Canada are insured in London against loss by theft. In another part of the world, London insures the liability risk on a park in Israel.

Reactor and Radioisotope Users in U. S. Through 1963

Radioisotope users are likewise busy in Alaska (5), Hawaii (7) and Puerto Rico (11). Anchorage, Alaska, has a power reactor coming. In addition to those shown, 264 new military, research and other reactors are in prospect.

Atomic Energy Commission

ATOMS-FOR-PEACE:

a new job for insurance

Our world-leading atomic industry is big —and it's protected, by coverages developed by American insurance.

TWENTY YEARS AGO, how many Americans dreamed of some day reading the evening paper in a living room lighted by nuclear power? At most, a roomful of specialists, perhaps. But today, it is accepted without awe that in another 20 years, most of our new power stations will be units in the nuclear era.

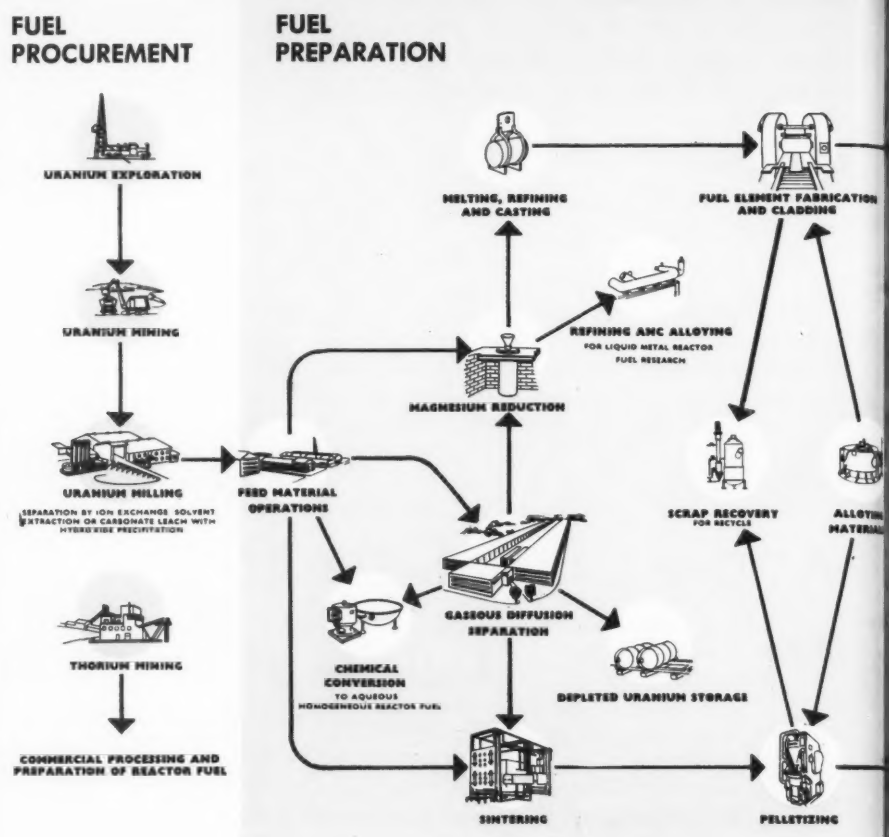
In an atmosphere of cold war and hot weapons, progress on the constructive side of atom-splitting has sometimes been overshadowed by new military applications. But the peacetime potential in our newest industry is staggering. Many experts rate harnessing the atom as more important to man's future than building the steam or internal combustion engines. Some say the cultural effect will be as great as that precipitated by the discovery of fire.

The U. S. atomic industry, of course, is barely off the delivery table, but already it weighs in as a billion-dollar addition to the economy. Use of atomic energy in our private enterprise system dates only from 1954, in authorization by Congress under the Atomic Energy Act. Since then, over totally new problems in such basic areas as research, engineering, construction, financing and protection, we have logged remarkable progress in the peaceful uses of atomic power and its by-products.

In insurance, for example, the development of immense atomic pools to provide property and liability insurance needed by the firms which are building, supplying and operating nuclear reactors stands out as an all-time industry-wide achievement.

Whether insurance men of the pre-Hiroshima era ever thought they would be parties to a pair of policies totaling $115 million in property and liability coverages on a single plant is unlikely. But today it's true. What's more, a supplier who delivers radioactive materials to the privately owned plant can also get king-sized insurance protection, up to a combined maximum of $10 million from the two pools—one of stock companies and one of mutual insurance firms—that have worked closely together in pioneering the insuring of atoms-for-peace.

Perhaps as valuable to a reactor operator—and to the general public—as the $60 million available in liability protection alone, is the engineering and loss prevention service that comes with the policy. Experts carefully keep



FLOW CHART OF

THE U. S. ATOMIC INDUSTRY

Atomic Energy Forum Chart

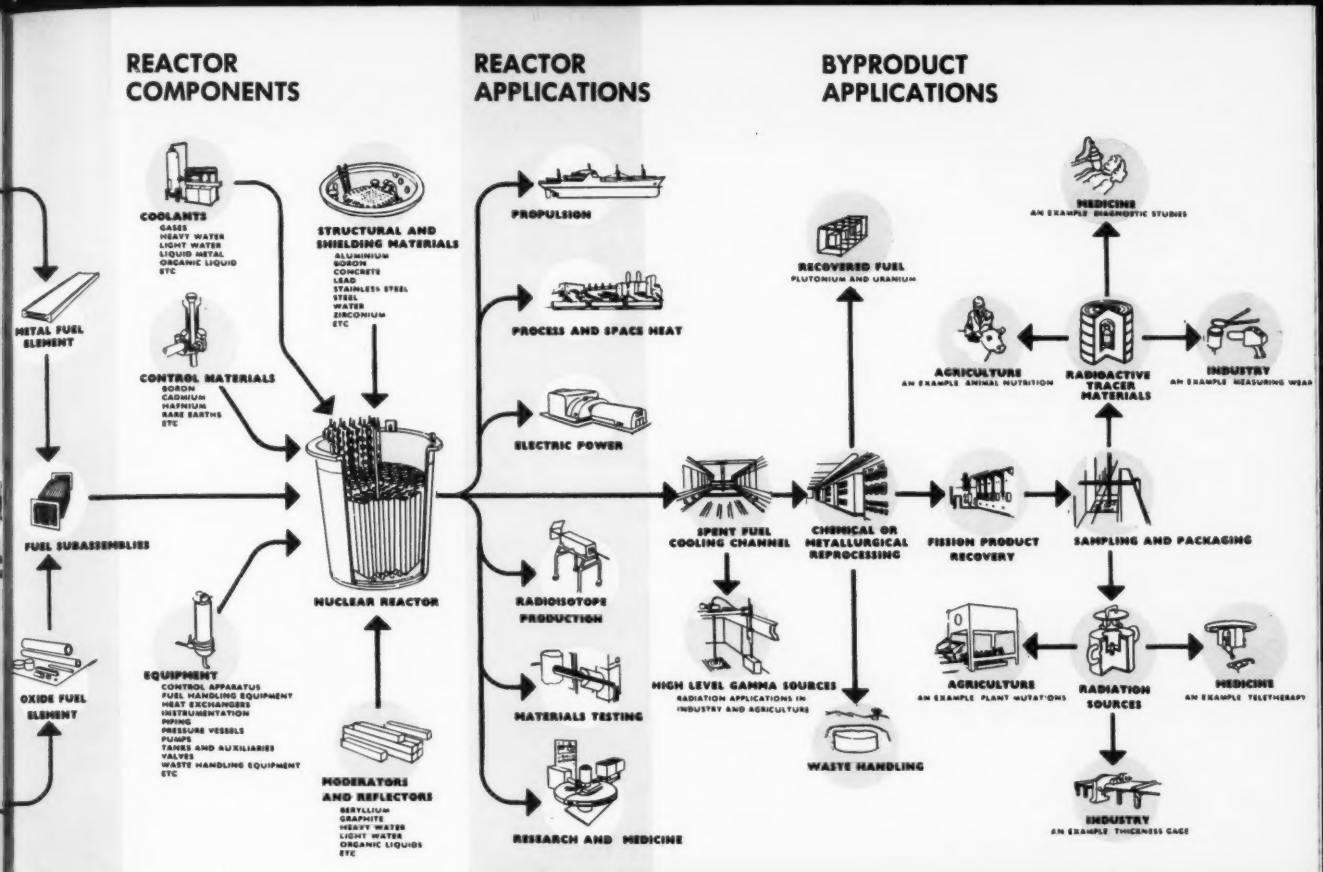
on top of the safety program, not only as respects the nuclear possibilities, but also in the areas of fire, boiler and machinery mishaps. This, in essence, has been the unique approach of the atomic industry and its insurers to safety.

Historically, an industry—such as automobiling—has grown first and the taming process has been left to later, often with unhappy results. In nuclear energy, the safety engineer and the health physicist have never been out of the picture, as proved by a low-accident record unrivaled in our economy. (A more detailed look at the safety problems and accomplishments in the industry will appear in a forthcoming issue of the Journal.)

Just how far insurance has progressed in its new job of protection for the atomic age can be learned by looking at how much coverage is now available for owners of atomic installations, workers in the industry, and the general public. First it should be noted that the possibilities of a major accident are extremely remote. Notwithstanding, the nature of the nuclear industry has spurred insurance innovations to match the promise of the atom in its new business surroundings.

Rounding up, then: First, investors put many millions of dollars into a nuclear power plant and need protection on their investment. They can get it, about $55 million worth of property insurance per plant. Next, workmen's compensation statutes—in many states now being made more specific and, in others, already updated as respects this new occupational hazard—offer protection against injuries from radioactivity or nuclear accidents. In the case of a supercatastrophe, as much as $100 million might be involved. Group and individual accident and health policies also provide protection against atomic injuries, in an amount impossible to estimate but assuredly substantial.

In the public liability area, the limits have been set by the federal government; $500 million



in damages is the most the operator of one plant can be held liable for in the event of a nuclear accident. Private insurance provides $60 million of the protection—the largest single liability coverage ever offered on any one risk—and the government assumes responsibility for the difference between the maximum and the private coverage.

All in all, the insurance industry has pulled together a potential $200 million in all types of coverages for any one atomic power station, quite a bulwark of protection for an industry barely five years old.

The atomic business in its present stage is full of unmeasurables: How big will its contribution to mankind eventually be? What are the exact dimensions of all the risks and hazards involved? Will its final value, already shaped as huge, be known in, say, our lifetimes?

We'll have to wait and see. Meanwhile, insurance and other members of the industrial complex are busy on all fronts to give us the best and the most from atoms-for-peace. ⊙

Argonne National Laboratory

Industrial use of radiation has been estimated as saving a half billion dollars a year. At Argonne Laboratory, radiation from elements used in food research is shielded by 18 feet of water.

FROM OUR ANNALS

Washington Mount Vernon

February 22, 1732—December 14, 1799

"No estate in United America is more pleasantly situated than this."

Washington himself thus described Mount Vernon when he was living there more than 150 years ago.

It would take another Washington to describe the veneration with which Mount Vernon is enshrined today upon the 227th birthday anniversary of the Father of his Country. No other spot, not consecrated to the Deity, can match it.

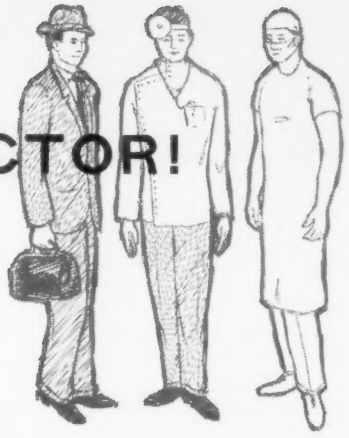
Preservation of this priceless shrine, "to be forever held sacred to the Father of His Country," is the charge of The Mount Vernon Ladies Association of the Union, under a Virginia charter granted when the Association acquired the estate in 1858. The present area is just less than 500 acres.

Mutual insurance, in a policy memorialized on this page, provided the first fire insurance protection on Mount Vernon. The original document and one other Mount Vernon policy, both issued by the Mutual Assurance Society of Virginia, which is still active, are preserved in Richmond. These are priceless historical documents themselves, in that they include interesting diagrammatic representations of the Mount Vernon buildings, with brief notations as to construction materials.

General Washington's Mount Vernon successor, Judge Bushrod Washington, was the insured proprietor under these policies. To him, a nephew, were bequeathed the Mansion House and 4,000 acres by Washington's will after Mrs. Washington's death. Bushrod Washington was an Associate Justice of the U. S. Supreme Court, and after his death in 1829, Mount Vernon passed through the estates of three other Washingtons before being acquired by The Ladies' Association.

Today the Mansion and subsidiary buildings are protected with broad risk insurance in an amount of nearly $1,000,000, distributed equally among five different companies. The collection of memorabilia and documents is partially insured under fine arts coverage. ⊙

DOCTOR, DOCTOR!



Which One Assures Claimants the Intended Benefits of Workmen's Compensation?

"An injury to one is the concern of all."

SUCH WAS THE SLOGAN of the Knights of Labor in the heyday of its labor-management influence, some 80 years ago. Terence Vincent Powderly, then the leader of the Knights, little dreamed that some day the "concern of all" would be mobilized through workmen's compensation laws in every state of the U.S. In fact, the Knights of Labor, superseded by the American Federation of Labor, passed from the national scene before the advent of workmen's compensation.

It remains to K. of L. credit, however, that its creed of the 1870's is today encompassed in our state workmen's compensation laws.

That philosophy implies, among other things, that the injured workman shall not be abandoned to his own devices and resources. And, he isn't.

Providing the best physicians available is standard procedure under most of our state workmen's compensation laws. This medical care is at the expense of the employer or the insurance carrier. In all but a few states, as shown in the accompanying chart, employers or the insurance carriers select these physicians themselves, or have supervisory direction over physicians selected by injured employees.

An alternative plan—unrestricted choice of physician by the employee—will again be an issue in at least some of our 1959 state legislative sessions and on the national scene, with various organizations and interests aligned in support of 100 per cent employee volition.

Opposed to such a plan is a formidable array of experience, precedent and practice. As a matter of fact—and of routine—employers are more likely than not to take the employee's physician. Labor, itself, in the areas of its health and welfare plans, is opposed to unrestricted choice of physicians by employees. As for the policy of management, it really fulfills the old K. of L. slogan, "An injury to one is the concern of all." Management, employers and their staff physicians are all concerned that everything and everybody operate so that the workman gets what is best for him, that he makes no mistakes and that he isn't bilked with an incorrect diagnosis, improper care, excessive treatment, undue worry, exorbitant costs, delayed physical rehabilitation and other evils which can befall him if he gets into unqualified and unscrupulous hands.

Understandably, the prevailing policy, with only rare states excepted, is to give employers pre-option either in the selection or in supervision—or in both—in the matter of physicians and medical care.

First of the well-founded reasons for this policy is the point of obligation and responsibility. The employer and his insurance carrier are required to furnish medical care and hospitalization; further, the amount of residual disability determines how much the employer must pay. In many states, the potential liability of the employer for medical treatment to an injured employee is virtually unlimited. Inasmuch as they are responsible for the result the physician achieves, the employer and insurance carrier should have authority over the doctor. Otherwise the employer would be required by

law to be responsible for the activities and judgment of persons who were not selected by him and who would not be fully responsible either to the employer or the employee.

Modern Physical Rehabilitation Many-sided

¶ 2. Rehabilitation, which is the heart of the workmen's compensation system, encompasses far more than merely getting a doctor on the job, regardless of who selects that doctor. Modern physical rehabilitation transcends the role of the family doctor, or of the personal physician, a friend's doctor, or a practitioner actively seeking the case.

If done properly, rehabilitation starts the day the patient is injured or at the moment it is known that he is going to have a permanent disability. Dr. Howard A. Rusk, noted rehabilitation expert, describes it as what happens between the bed and the job—the program that takes a man back to productivity to live the best life that he can with what is left.

It involves early and correct diagnosis, counseling of the injured worker to obtain his cooperation with needed medical, surgical and rehabilitation services; physical rehabilitation; vocational testing and vocational education in cases that cannot be physically restored to employability, and lastly, placement of the individual in industry.

This is a composite of jobs which may be beyond the ken of the personal physician or the family doctor, regardless of how skilled they may be in many other phases of medical science. In fact, employers, insurers, administrators and, most important, physicians must cooperate in providing expert professional services to the end that every remaining ability of the injured worker will be salvaged as quickly as possible.

Selection by Employer Proves Good System

¶ 3. As between the two plans (a) supervisory selection by the employer and (b) unconditional choice by the employee, the former assures the maximum of professional skill for the injured or disabled worker. In fact, there has been little complaint about the quality and the results of treatment under this plan.

Providing medical care of high order is enlightened industrial management, both from the humanitarian standpoint of the worker as an individual and also toward the worker as

SELECTION OF DOCTOR

Under State Workmen's Compensation Laws

State	Choice by Worker	Choice by Employer or Insurance Carrier	Change May Be Ordered by W. C. Agency
Alabama		●	
Alaska		●	
Arizona	●		●
Arkansas		●	●
California	●[1]		
Colorado		●	●
Connecticut		●	●
Delaware		●	●
District of Columbia		●	
Florida		●	●
Georgia		●	●
Idaho		●	●
Illinois		●	●
Indiana		●	●
Iowa		●	
Kansas		●	
Kentucky		●	●
Louisiana		●	
Maine		●	
Maryland		●	
Massachusetts	●		
Michigan		●	
Minnesota	●		●
Mississippi		●	
Missouri		●	●
Montana	●		●
Nebraska		●[2]	●[2]
Nevada		●	●
New Hampshire	●		
New Jersey		●	
New Mexico		●	
New York	●[3]		
North Carolina		●	●
North Dakota	●		●
Ohio	●[4]		●
Oklahoma		●	●
Oregon	●		●
Pennsylvania		●	
Rhode Island	●		
South Carolina		●	●
South Dakota		●	
Tennessee	●[5]		
Texas		●	●
Utah		●	●
Vermont		●	
Virginia		●	●
Washington	●		●
West Virginia	●		
Wisconsin	●[6]		●
Wyoming	●		
Hawaii	●		●
Puerto Rico		●	●

[1] On request from list of three nominated by employer.
[2] Employee may select for dismemberment or major operation.
[3] From panel authorized by the Workmen's Compensation Board.
[4] Except where employer is self-insured.
[5] From panel of three nominated by employer.
[6] From panel named by employer.

a productive unit in the organization. Besides, the employer has a direct interest so that the injured worker will be rehabilitated to the greatest extent possible. If an eye or a leg can be saved, better to get the medical skill that can do the job than to pay compensation for loss of the member.

Accordingly, the diagnosis and treatment of many industrial injuries and diseases, and the rehabilitation of persons involved, are a highly developed part of modern medical practice best performed by those with special experience and skills.

Doctors in industrial medical departments have had special training and experience in handling workers who have been injured or who have occupational diseases. They have first-hand information about the place where the injury occurred, and the working environment that may have produced the disease. They understand the psychology of the injured worker and realize how important it is that he return to his job as soon as possible.

The compensation laws in many states have, in fact, taken the decision—and choice—out of the hands of the employee and his personal physician by saying that the employer shall do everything possible in the way of medical treatment for so long a time as the process of healing and the nature of the injury require.

Employer Selection Can Benefit All Parties

¶ 4. Both the employee and the employer gain through the elimination of delays, waste, and inefficiency when the employer has a voice in the selection and supervision of the physician.

The better the medical care and the sooner he gets back to his job, the less the worker loses in (a) the waiting period, (b) earnings in excess of compensation, (c) expenses incidental to removal from regular activities and (d) the mental anguish of enforced idleness.

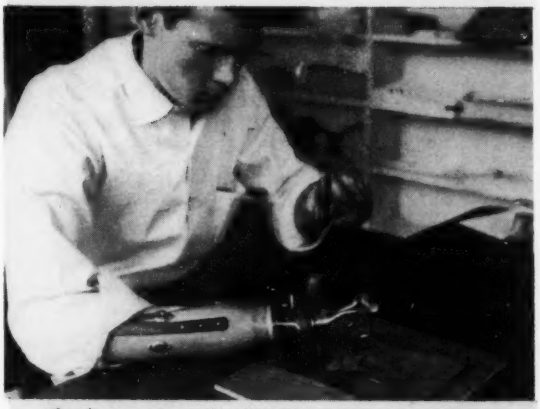
As for the employer, until he can get injured men back to production, there are wasteful outlays in the form of compensation payments, labor turnover, burdens on the community and incidental expenses imposed by law.

Eye injuries, especially, require skilled care. Mere removal of foreign bodies may expose the employee to needless suffering and loss. If the injury had been treated by an eye specialist in the first instance, the disability might have been materially reduced; in some cases blindness might even have been prevented.

REHABILITATION
Requires Experts

Lumbermen's Mutual Casualty Company Photos

Getting well-qualified experts on the case is a first all-important step in rehabilitation.



The better the rehabilitation program, and the faster the worker progresses, the less he loses.

Modern physical rehabilitation's goal: A useful, productive workman restored to his best life.

Doctor, Doctor!

The all-important claim adjustments can be handled with a minimum of delay, waste and expense, when selection of the physician is done with some guidance from the employer. Such a physician is better qualified to deal with industrial injuries and can estimate the disability commensurate with the type of injury. Hence, compensation payments are not delayed, further medical reports are unnecessary and cost estimates do not have to be revised.

As another instance, in some states the law provides for a schedule of permanent disability based not only on the loss of function, but also inclusive of subjective complaints, described in terms required by industrial accident commissions. Unless qualified physicians are used, such cases may require examination by the industrial board or the appointment by the board or commission of a qualified medical examiner.

Cost Comparisons Favor Employer Guidance

¶ 5. Comparative costs are one of the strongest arguments in favor of giving the employer a voice in selection of the physician.

Already employers are paying out $1.6 billion annually to insure or self-insure workmen's compensation costs. In the light of that total, any wasteful excessives are an unjustified burden on employers, the states and the whole compensation system.

Over-treatment of patients is the worst of the cost-boosting evils unless qualified, carefully selected physicans are used. But it is not the only one. A partial list of additional costs includes those under the heads of (a) prolonged restoration and delayed rehabilitation, (b) excessive fees and exorbitant bills impossible or difficult to combat, (c) higher overhead caused by the employer being out of touch with every case, since even his own physician might be barred from seeing an injured man; (d) increased litigation and controversion in many cases since the present system of direct and prompt payments would be impossible; distrust and suspicion would be engendered, (e) bill collecting problems for industrial accident boards and commissions.

¶ 6. Management is not opposed to supervised or bilateral selection of his physician by the employee. But management is opposed to having the workman exploited, abused and perhaps even bilked. Certainly the liberal provisions of our compensation laws should not be license for building up lucrative practices in the treatment of compensation cases.

To the detriment of the worker, what too often ensues unless there is judicious selection of the physician is a triumvirate of over-zealous attorneys, over-acquisitive claimants and over-attentive doctors. The consequences for the worker, often without his knowing it, are demoralization, chronic invalidism, and progressive inadequacy to face the issue of work.

Even the case for the doctor-patient relationship, which is acknowledged to be the strongest forte of the employee-option system, does not stand up in actual practice. Management and medical authorities point out that the worst problem of all is the most conscientious physician in patient-doctor relationships—the physician who is trying to do his best, but who lacks adequate training and is unaware of his shortcomings.

¶ 7. Widespread support for supervisory selection of physicians by the employer is best exemplified in the heavy preponderance of states which authorize and follow the principles of this practice *(see accompanying chart)*. Support for this policy also has been voiced at one time or another by various organizations and authorities. Organized labor even favors the policy when its health and welfare programs are involved. Organized medicine likewise is split. Probably some segment far short of the majority of practicing physicians really believes in unsupervised choice by the employee.

Precedent Is on Side of Choice by Employer

¶ 8. There is ample precedent, both in governmental and private agencies, for the policy of giving the employer some supervision over the selection of medical facilities in workmen's compensation cases. An outstanding example is the treatment and hospitalization of veterans by the Veterans Administration. In this and other cases where persons receiving medical benefits do not pay for them, such services are at least supervised by the government or by other agencies or persons that pay the costs. Instances close-home to all the public are the treatment and hospitalization of indigent and public-care patients in city, county and state hospitals.

That is "the concern of all" at its American best. That, in short, is what management seeks in the treatment of its workmen under our state workmen's compensation laws. ⊙

A VERY IMPORTANT FEW MINUTES

Let's say your house is on fire. It could be. And it could be *serious* unless you act fast and expertly. First you get the family out safely. Then you call the fire department. They'll usually be there in three to five minutes these days. But those minutes are crucial, and you're still in command. What you do or don't do is going to be vital, because those few minutes can be the margin in defeating fire, whether it be in a ranch house or in a refinery. ⊙

1 BETWEEN PHONE CALL AND FIREMEN

Portable fire extinguishers are the one solid answer to the question, "What can I do until the fire department arrives?" They can help you break the back of a possible major blaze, and save you money by quickly snuffing increasingly expensive minor fires.

2 EXTINGUISHERS WE'VE GOT . . . BUT

Good portable units are available in many types and sizes. In 1957, more than 600,000 sold for $16½ million, and paid for themselves amply in peace of mind and property saved. But, too many were sheer waste—wrong kind or in the wrong place.

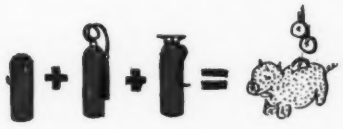
3 FIRST, WHAT TYPE TO GET?

The three basic kinds of fires —ordinary combustibles, flammable liquids and electrical— take different kinds of extinguishers. You should know what your particular fire-danger is and have the type of portable extinguisher made to fight it. Your fire department will help you pick the right kind and suggest the best place for stationing it.

4 HOW MANY AND HOW BIG?

You need enough extinguishing capacity to do a tough job—the job of guarding against the worst fire you don't want to see happen. So, don't fudge; a few dollars more can double your fire-killing power. Reputable distributors have data, based on experience, that will guide you in making the safest buy for your particular situation.

5 BUSINESSES CAN CUT INSURANCE COSTS

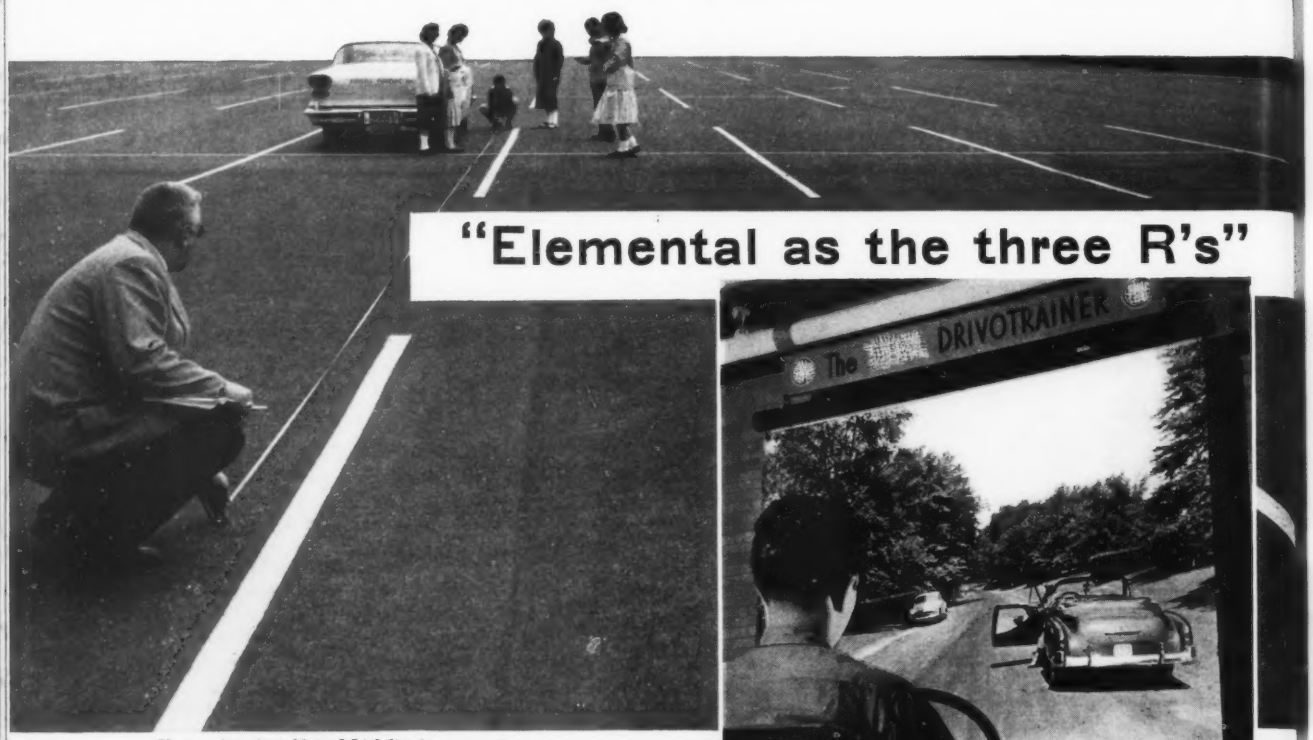


For commercial or industrial locations (homes are not eligible for rate credits), check your state fire insurance rating bureau on the size and number of extinguishers to buy. They'll tell you how many you need to get a credit on your insurance rate.

6 AND BEFORE YOU HANG IT ON THE WALL

A little training with your portable fireman assures best results; make sure all likely operators know what to do. Inspect the device regularly, too, and take care of it as recommended by the maker so that it will be ready and fully effective when needed.

DRIVER EDUCATION



"Elemental as the three R's"

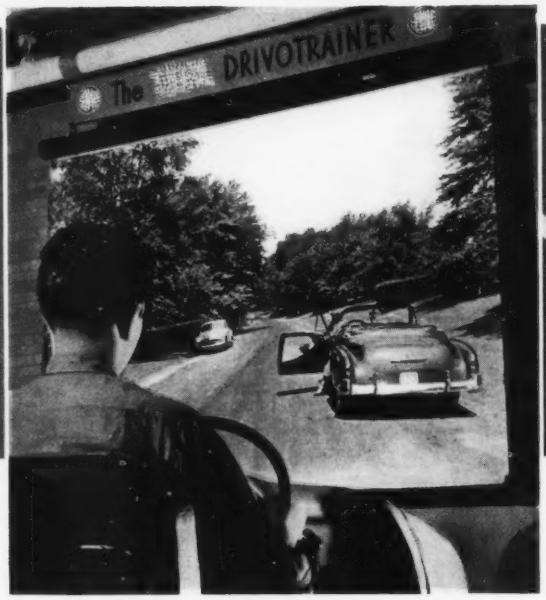
Photos: American Mutual Liability Insurance Co.

By PAUL FRIGGENS

UNTIL RECENTLY, all I knew about driver education was that my daughter took it in high school and nearly ran down a policeman. Now I discover it's the fastest-growing new field in our public schools today. Nevertheless, a lot of people call it a frill and a waste of taxpayers' money. Defenders say it's fundamental, almost mandatory. All of us, as citizens paying the bill and driving the highways, have a personal stake in it.

The novel idea was introduced in State College, Pennsylvania, only 25 years ago. Today more than half of the public high school students in the United States—probably 1,200,000 in 11,500 schools—are getting some form of driving training. Thousands of parochial students are being trained, too.

Average cost is somewhere between $35 and $50 per pupil, and many say much higher. Fourteen states now pour millions into state



Meeting emergencies, a skill hard to teach in conventional driver training, is mastered more safely and expertly by means of new instructional techniques using an auto simulator, the Drivotrainer, and specially made films to "create" problems.

Students in modern driver training courses study the many hazards and fast-changing situations of our congested traffic by means of magnetic boards. Here, they see where a driver might have to do 15 or more things correctly and promptly.

aid, and more appear ready to do likewise. So far our schools have turned out nearly 3 million driver-trainees at an estimated cost of $100 million.

"It's no frill. It's a life-and-death matter!" That's the judgment of educators and safety experts. With nearly 40,000 highway deaths every year and tens of thousands of maimed and injured, they argue that driver education is not only sound and justified, but is absolutely indispensable. "The results of driver education," says the American Automobile Association, "indicate that in general these courses reduce traffic accidents by *one half*."

Training can be as simple as the one-man setup which hard-working, genial Milton R. Binger runs in Cheyenne, Wyoming. "We started out part-time and now parents want more!" Some cities—Cincinnati and Miami, for example—are experimenting with TV driver training.

Michigan is pioneering a revolutionary program to train 100 per cent of its high school students. In that state everybody under 18 is now required to take high school driver training in order to qualify for a driver's license. Soon other states may follow suit.

"I am a little hesitant to get out on the highways, knowing what I know now," declares Melvin T. Schroeder, supervisor of driver instruction in Los Angeles city schools. "For instance, we know that a person should allow a car's length to stop for each ten miles per hour. Yet we violate this all the time. Driving on our fast highways today is deadly serious business; we are compelled to give driver education."

Los Angeles is giving driver education to 35,000 10th graders in 46 senior high schools. The program is offered in two phases: 10 weeks in the classroom—required for graduation—followed by voluntary behind-the-wheel training. Sixty teachers, working split shifts, give behind-the-wheel training alone. It's too strenuous with the pupils all day! In all, 157 teachers are engaged in the program. The city owns 68 automobiles. Driver education is charged up to "excess cost" in Los Angeles; California forks over $35 per pupil in state aid toward the $55 total.

"Our first job," explains Schroeder, "is to make good citizens of these young drivers. We think *attitude* comes before skill."

Able teachers are the key to driver-education success. Hence Los Angeles has no part-time bus drivers or fill-ins. "We pay them the same as the math or science teacher and as fully respect them," says Schroeder.

Having improved students' attitudes, Los Angeles is ready to teach driving skills. Students sit in simulators—life-like driving trainers designed to give the youngsters just about every "driving" emergency they would meet in an actual car. With 15 simulators to a classroom, Los Angeles is able to cut down on expensive behind-the-wheel training and serve more students. Finally, the students take at least six hours behind the wheel and if they make the grade, they graduate to freeway driving.

"With this whole city on wheels, we can't think of a more immediately practical subject than driver training," concludes Schroeder. And a good part of California—with nearly 200,000 in driver training and 3,500 teachers—apparently agrees.

If you want to see advanced driver training, visit Detroit, or for that matter any of Michi-

How is your own coordination and reaction time? Advanced student drivers can tell you how to find out—and maybe live longer.

High schools in 16 states now use the auto simulator, Drivotrainer, as many as 15 in a class, for risk-free drilling of inexperienced youths in everyday driving skills, especially automatic reacting and safe procedure in road emergencies.

gan's eight leading cities. In that state in 1955, the highway death toll reached 2,008 persons, with thousands more maimed and injured. Officials summoned an emergency statewide traffic conference. The group recommended a sweeping new legislative program including the point system (See January JOURNAL OF AMERICAN INSURANCE) and driver education for every high school, public and parochial. The program was adopted, with $25 state aid per pupil, to boot!

Detroit schools alone own 78 automobiles of different makes and are pioneering *mass* instruction. They call it "multiple car training." At key locations the schools own off-street driving ranges (usually 200 by 500 feet and costing from $40,000 to $75,000). These are equipped to simulate actual street conditions. On these ranges, a single instructor gives lessons to twelve solo cars simultaneously.

"With our multiple car plan," says Ronald D. Patterson, Detroit supervisor of safety education, "we train 18,000 a year and devote twice as much time to behind-the-wheel instruction." Like other cities, Detroit gives another 30 clock hours to classroom instruction—everything from attitude to keeping the car running.

At Michigan State University, East Lansing, Dr. William A. Mann studied 100 of the "problem" high school drivers. He traced most of the aggressiveness and trouble back to the home—dictator parents, divorce, neglect, anxieties. "In short, our mixed up children become our mixed up drivers. We've got to pay more attention to attitude."

Another thing Michigan is discovering: Teach the children and some of the driver education is sure to rub off on the parents. In one study, about half of the parents replied they had learned from their children and were now driving better themselves!

In view of the pros and cons, where is driver education headed?

For the answer, the JOURNAL went to the "summit" meeting on driver education, held at Purdue University, Lafayette, Indiana. This was the third National Conference on High School Driver Education under auspices of the National Education Association. With 40 states represented, school administrators, teachers and safety experts came up with two forward-looking recommendations:

1. That teen-agers under 18 be denied driver licenses until they have completed an approved high school driving course. At present, 35 states license drivers beginning at age 16.

2. That teachers of driving education should be better prepared; hold a bachelor's degree, and have special qualifications besides—a minor in driver and safety education, and a valid teaching certificate in the field.

The fate of these recommendations and the future of driver education, itself, depend on two words—*apathy* and *money*.

Says Norman Key, executive of the National Education Association: "People are talking about the good old days and of returning to something more 'fundamental.' I wonder what's more fundamental than saving the lives of our future scientists and statesmen. But unfortunately, we haven't done much to tell driver education's story."

Leslie R. Silvernale, Michigan State University traffic expert, believes, "Our first big problem is public understanding and finance. People are aroused about math and science, but we must not allow driver education to be crowded out. Sure, it's expensive. But why make driver education justify a dollar-and-cents return any more than algebra or physics?

"Our second big problem is competent teachers. The time has come to upgrade and put driver education on a level with the rest of the teaching profession."

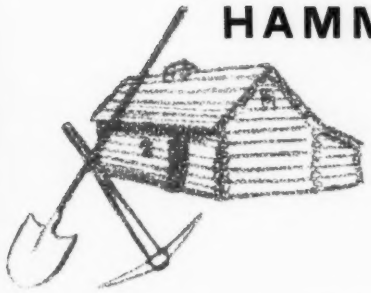
Amos E. Neyhart, pioneer educator of Pennsylvania State University, who first helped launch driver education, set the sights for the future: "Our challenge is to upgrade at both the college and high school teaching levels and to reach the remaining million youngsters who are not now getting any form of driver education in school. The day is here when driver education is as elemental as the three R's." ⊙

INSURANCE DOES IT!

Superior risks in the food canning and processing industry are insured by mutual companies in the U. S.; in Hong Kong a foods dealer carries insurance on his stock of bird's nest soup.

CLOSE-UPS OF OUR COMMISSIONERS

HAMMEL OF NEVADA



Paul A. Hammel, Insurance Commissioner of a colorful and fast-growing state, and recently vested with NAIC presidency.

A LITTLE INSURANCE of the right kind on the richest known silver deposit in the world would have given two Nevada brothers their just dues in wealth and fame. That, in turn, would have changed the whole story of the famous Comstock Lode, being commemorated this year on the 100th anniversary of its "discovery."

Discovery of Nevada's fabulous vein was really made in 1857 by two brothers, Ethan Allen and Hosea Ballou Grosh, sons of a Pennsylvania minister, and miners from the gold fields. Unfortunately, before they had attended to insurance and protection by getting their claims recorded, they died under tragic circumstances.

Henry Tompkins Paige Comstock, "the Old Pancake," sheepherder and prospector, took possession of the Groshs' cabin, supposedly found their records, and laid claim to the lode, which was then dated as discovered in 1859 and thereafter credited to Comstock's name. But insurance-wise, he, too, was improvident, later disposing of his rich holdings for insignificant bits.

Today, Nevada's fame is sloganized as, "Recreation Unlimited," but it's also the fastest growing state in the nation, rapidly luring industrial dollars with its national resources and favorable tax laws.

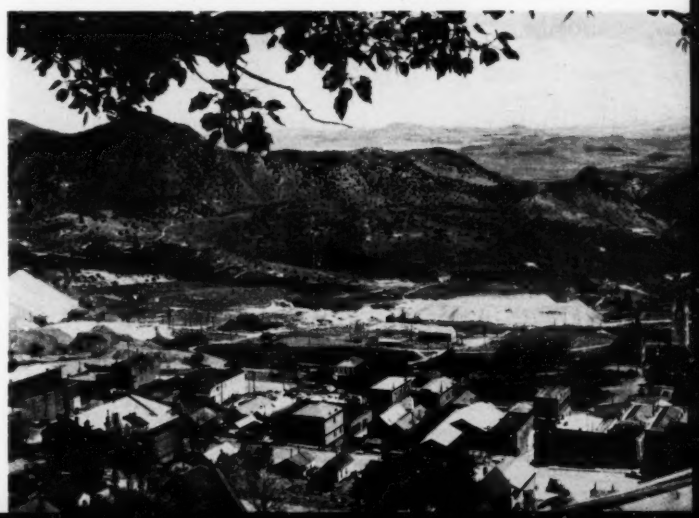
In insurance, alone, Nevada's mutual fire and casualty firms recorded a 53.3 per cent increase in premiums written from 1955 to 1957, and stock companies gained 8.5 per cent. State revenue from more than 400 insurance firms is two and a half times what it was when Paul A. Hammel was named commissioner of the new Nevada Insurance Department in 1951.

Commissioner Hammel has long been active in national insurance affairs, as well as in supervising and encouraging industry growth in his home state. Currently vice-president of the National Association of Insurance Commissioners, he has also been the organization's secretary-treasurer and chairman of its executive committee. He succeeded to the presidency upon resignation of President Northington.

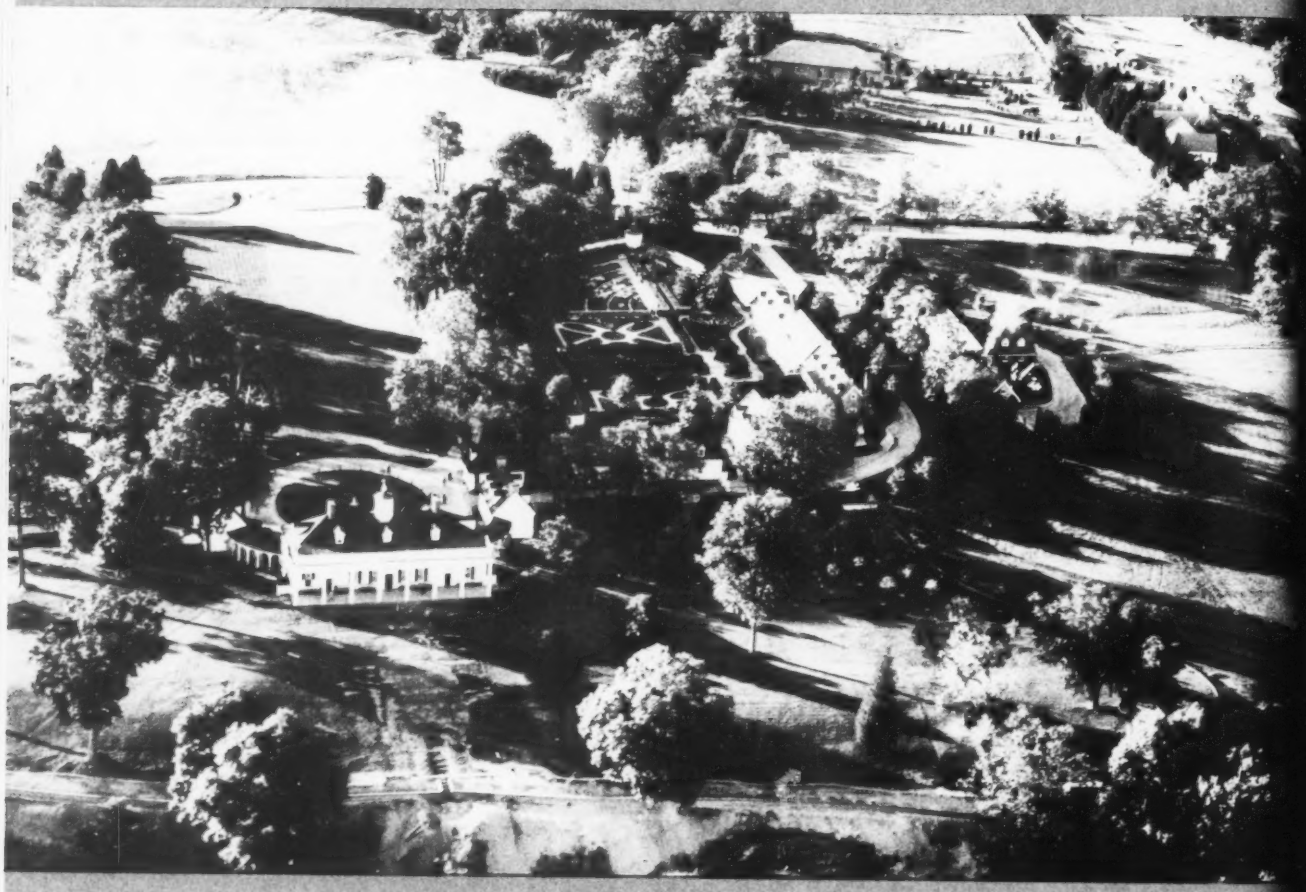
Born in Indiana, Nevada's commissioner went to college in Wisconsin, did graduate work in Pennsylvania and served three years in Europe with the armed forces before Carson City claimed him.

Hammel began his career as a school teacher, was a safety director eight years and an all-lines insurance man for seven. Outside his department affairs, he is a past president of the Las Vegas Kiwanis Club and a VFW national committeeman, a Mason and Shriner, and a member of the Federation of Insurance Counsel. ⊙

Don Boone—Nevada Department Economic Development



This is the centennial of discovery of Virginia City's wealth in gold and silver. Three-quarters of a billion dollars and 100 years later, it is now the "World's Liveliest Ghost Town."



United Press International

OUR COVERS: Front, Mount Vernon, history's most famous mutual-insured American building; back, a view never seen by George Washington, but portraying all he said of Mount Vernon (Page 24). It was taken from an American Airlines plane.